

# *The* NATION'S SCHOOLS

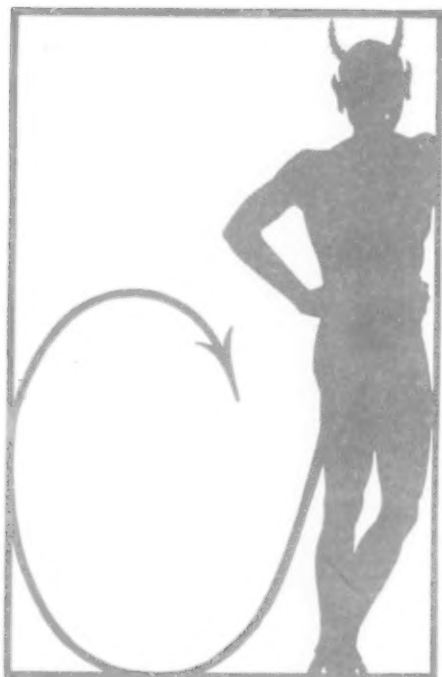
DEVOTED TO THE APPLICATION OF  
RESEARCH TO THE BUILDING, EQUIPMENT  
AND ADMINISTRATION OF SCHOOLS

VOL. VI  
No. 3

SEPTEMBER  
1930



Published by THE NATION'S SCHOOLS PUBLISHING Co., Chicago.



# Are you under the spell of that *little demon—* **ALMOST?**

Almost—but not quite—

That phrase has defeated the ambition of countless men and women. It may defeat the purpose of your school board to have an up-to-date school system, the most effective educational methods, highly attractive school buildings, simply because floors are allowed to remain almost—but not quite—clean.

But why?

Text books are not allowed to remain almost—but not quite—accurate. Teachers are not allowed to be almost—but not quite—prompt.

Why not defeat the little demon wherever he appears?

Keep floor cleaning methods up-to-date. Install a FINNELL SYSTEM, adapted to your school needs, floor area, the type of floors and the treatment they require. Here, too, you must beware of hastily selecting a floor machine, that is almost—but not quite—suited to the work. If it is too large or too small, or if it only scrubs, when you have some floors that should be polished, that little demon "almost" is at work again. FINNELL is the only system permitting complete flexibility in the creation of a system adapted to your needs.

It costs nothing to have a FINNELL expert make a survey of your school system and recommend which of the eight FINNELL models and auxiliary equipment is best suited to your requirements. Why not investigate now? For particulars address FINNELL SYSTEM, INC., 1509 East St., Elkhart, Indiana. Factories in Elkhart, Ind., and Hannibal, Mo.

# FINNELL

*Est. 1906*

**ELECTRIC FLOOR SCRUBBER-POLISHER**

For homes, too.

Finnell for home use. Twin disc. High speed. Ample power. Price anyone can afford. Waxes, polishes, finishes, scrubs—wet or dry. Sold on terms.



The new  
**FINNELL**  
Combina-  
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Scrubs faster than one can mop. Cleaner floors at lower cost than mopping. Scrubs and picks up water in one operation.



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The FINNELL scrubs and polishes—electrically, exerting from 35 to 60 pounds pressure on the brushes (depending upon the size of the machine.) Clean water is provided for every square inch of floor space and the brushes dig down beneath surface dirt until every particle is routed, even from between the cracks and crevices.

**IT WAXES - IT POLISHES - IT FINISHES - IT SCRUBS**



# Building the coming men and women of America

The American school boys and girls of today will guide the destiny of their country tomorrow. . . . The school superintendents and teachers are, therefore, the producers of the nation's most important product; and the school room is the factory in which this work must be performed. . . . The photograph below was taken in 1924. Happy and healthy children have been coming from this room ever since, and will continue to come many years hence. It is equipped with Univent Ventilation.



**N**OTE the Univent—a machine which draws air directly from out-of-doors—cleans it—warms it to a comfortable temperature—and silently delivers it to every pupil in the room, with agreeable air motion, but without drafts.

In schools where the Univent is in operation, records show a notably high standard of attendance. Children work in an atmosphere conducive to health of body and mind. They are better able to concentrate—to grasp and retain the knowledge that will be so vital in future years.

In selecting the Univent system of ventilation, school executives are meeting their responsibility as guardians of the health and welfare of the children of their community. And in addition, they are carrying out their pledge to tax payers by making an investment in a ventilating system that effects great savings in operating and maintenance costs.

Before you place your sanction on any ventilating system, know the facts about the Univent. Consult your architect or heating engineer, or get in touch with our nearest sales office. If you prefer, write for our illustrated book, "Univent Ventilation."

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\* Makers of the Univent, for the ventilation of schools, offices, churches and all buildings having an acute ventilating problem—the Herman Nelson Invisible Radiator, for residences, apartments, hotels, offices, and monumental structures—the Herman Nelson hiJet Heater, for economical distribution of heat in factories, mills, garages, warehouses, and smaller buildings.

# Thirsty Air is Conquered!

*Ingenious Humidifier makes schoolrooms pleasanter  
... and healthier*

**T**HIRSTY Air! Kiln-dry and super-heated. A constant discomfort and danger to pupils and teachers through winter months.

Ask your school doctor. He'll tell you that it opens the door to many winter ills such as colds, bronchitis, sinus troubles, mastoids. That it irritates nose and throat. That it chaps the skin. That it feels uncomfortable, even at high temperature.

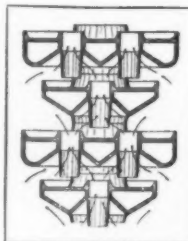
Ask your architect. He'll tell you that Thirsty Air drinks the moisture from walls, floors, woodwork, furniture . . . shrinking, cracking, and warping them out of shape. That it is not only a danger to health but an ever-increasing source of expense.

There's a way to conquer it. The Doherty-Brehm Humidifier is the much needed, marvelously efficient, inexpensive invention that eliminates Thirsty Air with all its devastating effects. To the air in any building with radiator heating, it automatically supplies just the right amount of moisture. It is not an inadequate radiator pan or makeshift; it evaporates from 20 to 100 gallons of water daily.

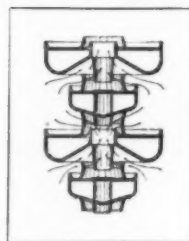
It is as simple as a radiator. It is installed in the regular heating system, just like a radiator. Easily installed in place of a regular radiator, heat is supplied by the regular heating system. Since more heat comes up to it on cold days and less on mild, the amount of water evaporated is automatically regulated to needs . . . for more moisture is needed for correct humidity on cold days and less on mild. And it acts as a radiator as well as a humidifier, giving off more heat than an ordinary radiator of the same radiating surface. It has no fans, belts, or motors; no pans to fill; no noise, steam, or odor.

One will adequately humidify a smaller school; an entire auditorium or wing in a large one. Extra units take care of a building of any size.

Thoroughly tested and proved by engineers of the highest standing, it already is providing comfort and health in hundreds of actual installations.



Here is a diagram of sections and air circulation for hot water systems



Here is a diagram of sections of the Humidifier for steam or vapor

\$150 to \$225 f. o. b. factory, installation extra, in beautiful metal cabinet. Other models in period cabinets. Supplied also for recessing into wall. Types and sizes for any building heated by steam, hot water, or vapor. Water, fed in at the top, spreads out over the horizontal first section, the overflow going down and spreading out over the second section, and so on until the last section is reached.

## *On easy payments if desired*

The price is surprisingly low. Even small schools where even slight expense is a major consideration can have it, buying it on installments and letting fuel savings help pay. It is sold through dependable heating and plumbing contractors, by **CRANE** branches under the **Crane Budget Plan for 10% down, the balance monthly, if desired.** Ask us to send a representative to explain fully. Or we will mail you literature.

**DOHERTY - BREHM CO.**

333 North Michigan Avenue, Chicago

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HUMIDIFIER**

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**O**UR plan is unique. We film the historic legend of your community. We interest the various civic clubs and organizations. The production is shown in your own school, and you derive a percentage of all tickets sold—without the need for guarantee of any sort. Your profit pays for a moving picture projector of your own, or for any other purchase your school might need.

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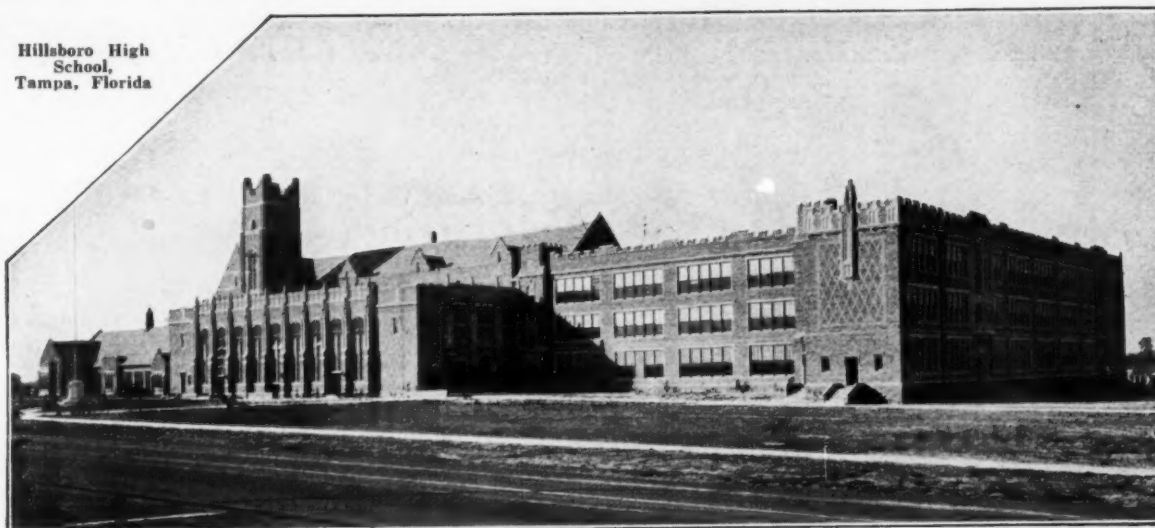
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*Send the coupon for free samples and full information*

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KRAFT TOWELS**

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Green Bay, Wis.

Send us free samples and tell us more about Singltowls.

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School .....

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# Let Conn Organize Your School Band



*Nicholas Senn High School Band, Chicago, '29 and '30 National Champions. Captain A. R. Gish, director. The great majority of instruments used in this band are Conns and Captain Gish is an enthusiastic endorser of Conn instruments.*

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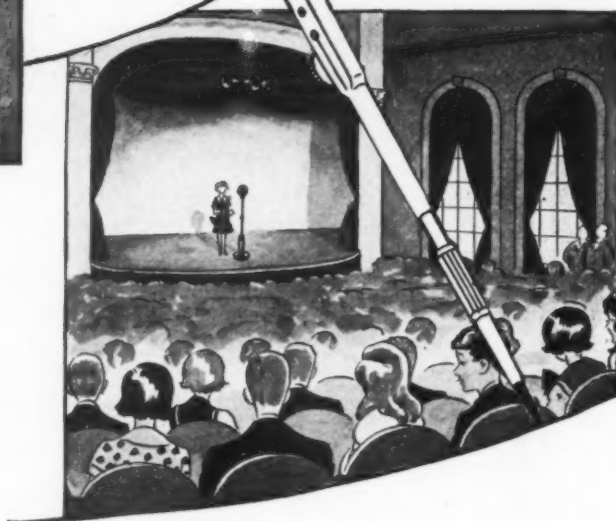
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Also ask about the Western Electric No. 4-A Audiometer which measures accurately and quickly the acuity of pupils' hearing.

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Graybar Building, New York, N. Y.

Gentlemen: Please send us the story of the Public Address System.

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ADDRESS .....

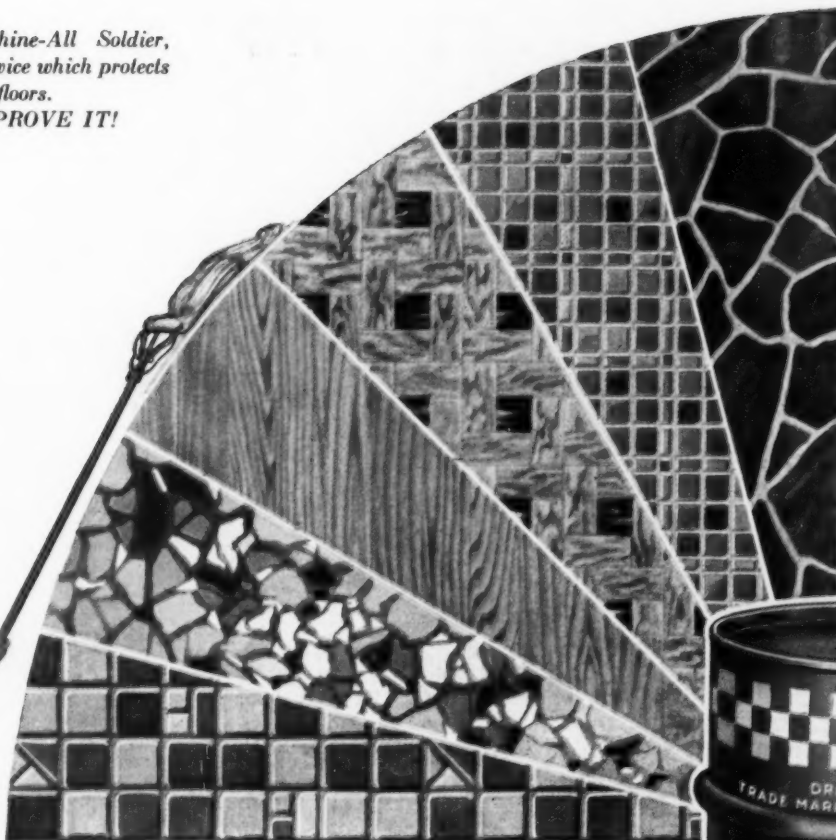
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PUBLIC ADDRESS AND MUSIC REPRODUCTION SYSTEMS

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gives a genuine service which protects  
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*Mary Institute, St. Louis, one of the most modern educational institutions in America, was designed by Study & Farrar, Architects, and built by the Gamble Construction Company, St. Louis.*

NO SPLINTERS - SMOOTH  
CORRECT FLOORING  
FOR GYMNASIUMS

IDEAL FOR HANDBALL -  
AND SQUASH COURTS -  
SAFE - NO SPLINTERS

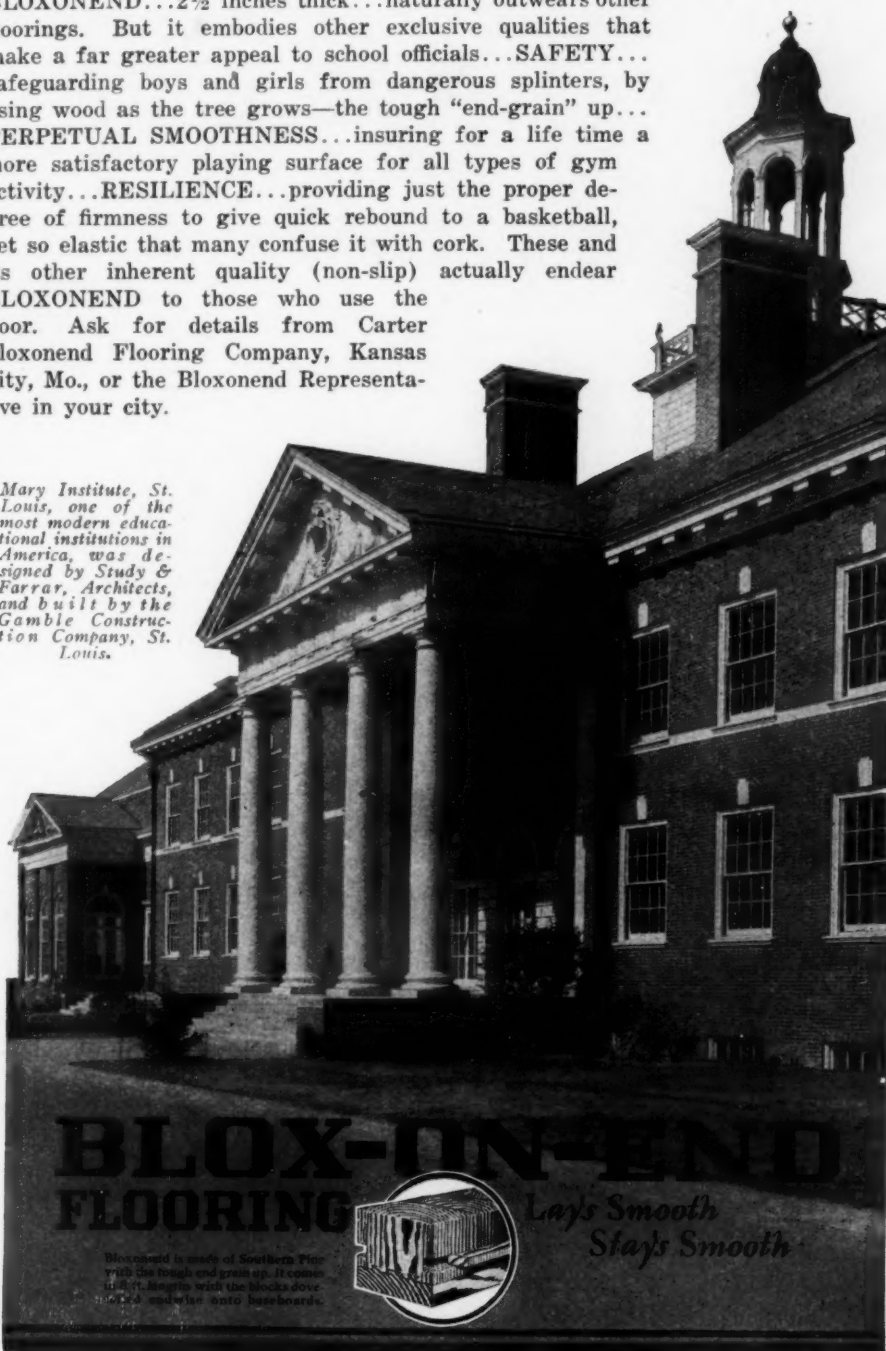
IN THE SHOPS OF THE  
COUNTRY'S BEST SCHOOLS

## BLOX-ON-END FLOORING

Bloxonend is made of Southern Pine with the tough end grain up. It comes in 2½" lengths with the blocks dovetailed under into baseboards.



*Lays Smooth  
Stays Smooth*





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Filled cans weighing 150 lbs. were raised electrically and lowered by gravity. Distance of lift between cellar and grade level was 16 ft. 8 inches, and current cost \$.0348 per k.w.h.

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296 cans were raised and lowered in one kilowatt hour.

15½ tons of ashes were raised in one kilowatt hour.

85 round trips of filled cans between cellar and grade level were made for one cent current cost.

These figures would not apply to every installation, because distance of lift and current rate per k.w.h. vary.

G&G Ash Removal Equipment is now in use in schools in 44 states, and is **standard equipment** with Boards of Education in many large cities.

*Write for catalog*

**GILLIS & GEOGHEGAN**

523 West Broadway

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# Spectacular Performance Overshadows All Competition



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Actual tests made in the world's largest building (the Merchandise Mart at Chicago) proved the New LINCOLN scrubbed nearly 3 times as fast as the nearest of its five competitors. The New LINCOLN scrubbed 25,000 square feet per hour, while its nearest rival scrubbed 9,000 square feet! Here are cold, hard figures that tell you in no uncertain language: "Don't buy any floor machine until you have seen the New LINCOLN!" Let us send it to you for a trial on your own floors.



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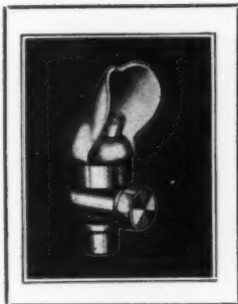
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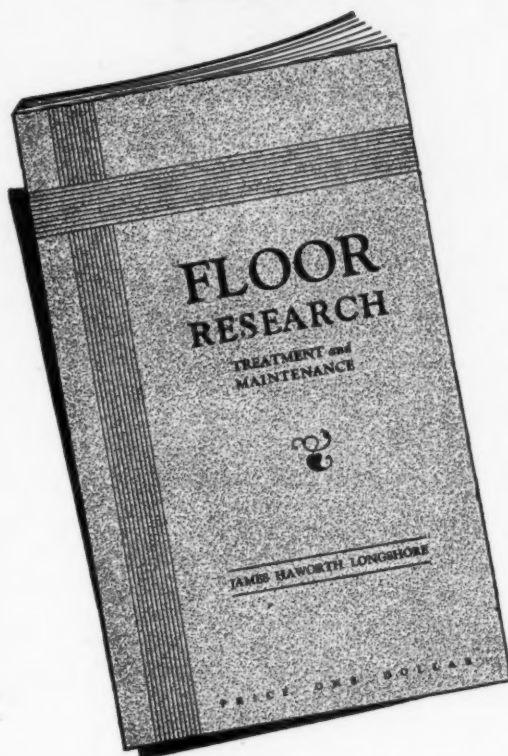
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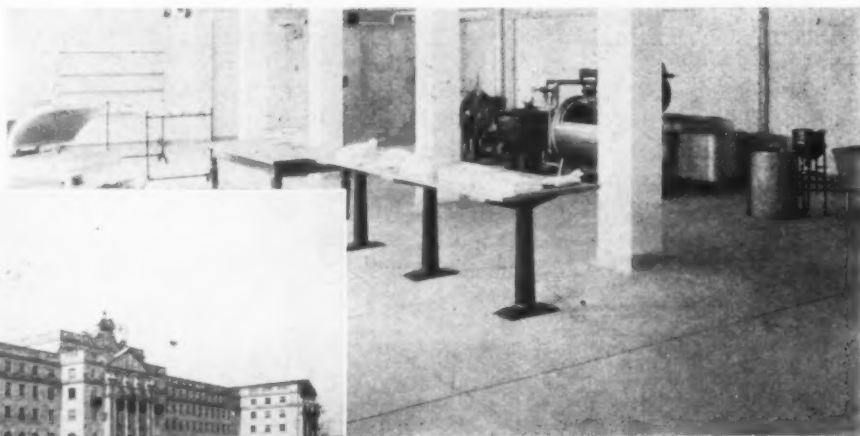
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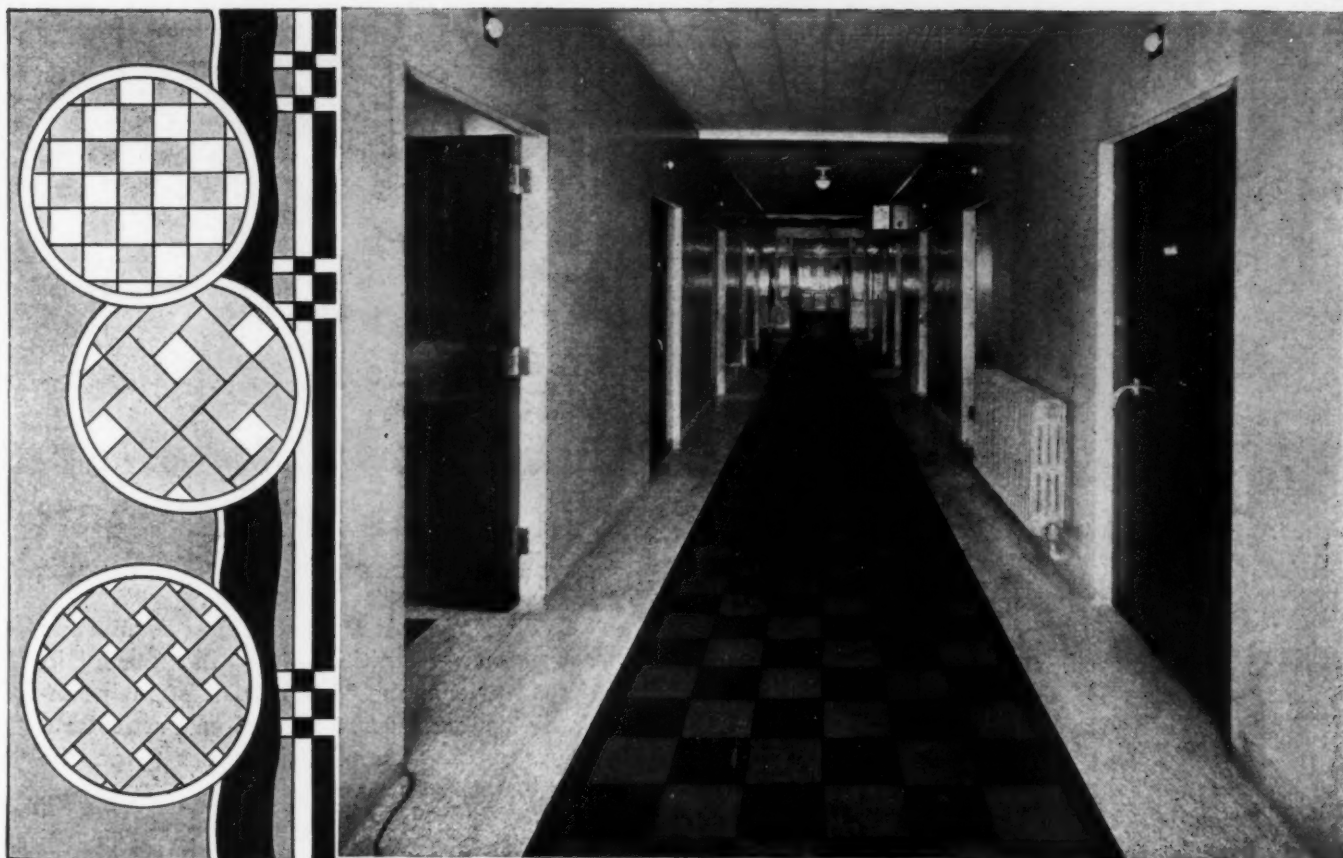


St. Mary's Seminary, Baltimore, Maryland, with a view of some of the equipment in its modest "American" laundry department.

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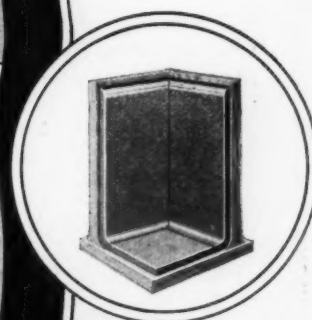
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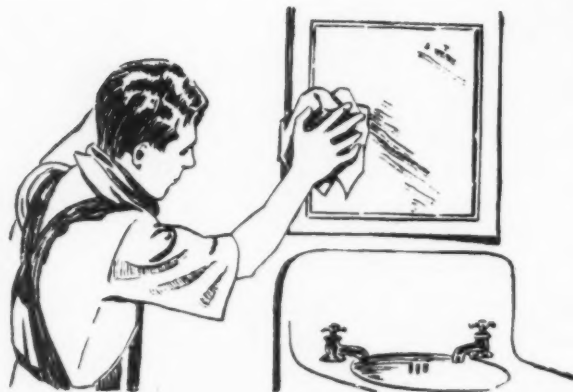
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—says another advertiser in this magazine

**SO TRUE** is this statement that despite the general recognition of its importance in school hygiene, the **METHODS** of maintaining high standards of sanitation, particularly in washrooms, are sometimes not given the attention they deserve.

Cleaning is a science and study that requires the same careful consideration by school executives as any administrative or teaching department.

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Drop us a line and get the detailed facts about this modern economical cleaner. A post card will do.

*Oakite Service Men, cleaning specialists, are located in the leading industrial centers of U. S. and Canada*

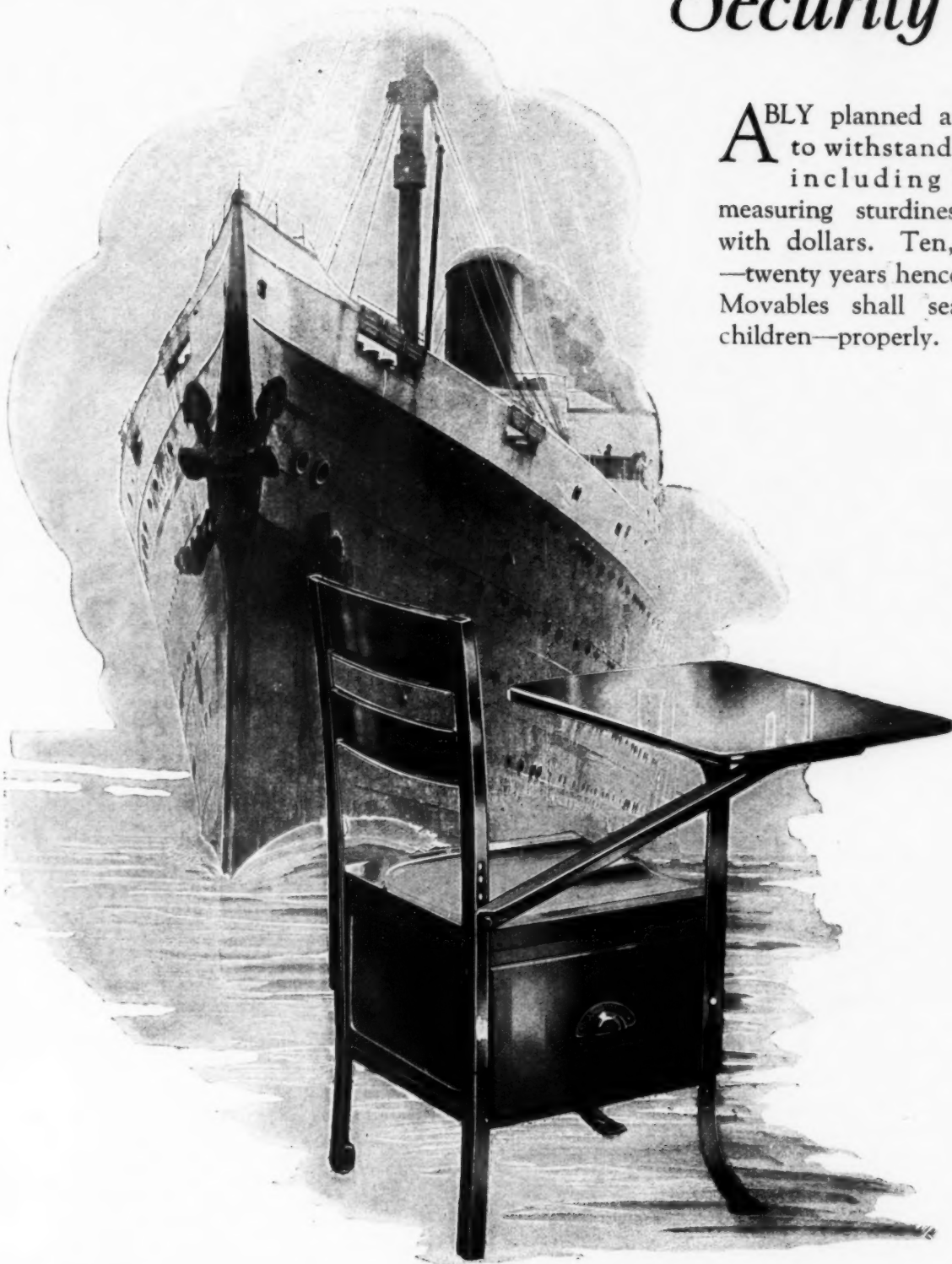
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**A**BLY planned and engineered to withstand every test—including Time. Not measuring sturdiness and safety with dollars. Ten,—fifteen,—yes—twenty years hence today's Royal Movables shall seat tomorrow's children—properly.



It will pay you to get the facts on this modern, economical method of seating.

Write for free trial sample chair, prices and valuable information for schools.

## THE **Royal** CHAIR "A Lifetime Chair"

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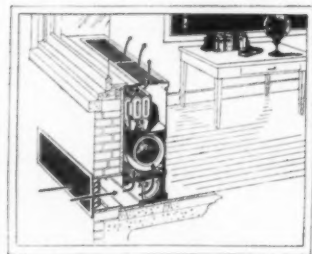


# Back to School

. . . . . but even indoors  
. . . they can have pure  
outdoor air all day long

SUMMER'S happy hunting grounds will soon be empty. Healthy, sun-bronzed youngsters are going back to school. They will miss the day-long sport and exercise, of course . . . but even more they'll miss the bracing outdoor air, if they can't have it. There's no reason why they can't! Classrooms can be filled with pure, summery outdoor air all winter long! Raw January air can be drawn indoors (without opening a single window) . . . filtered clean . . . tempered to mellow warmth . . . then floated quietly into the rooms . . . by Sturtevant Unit Heater-Ventilators. There are no drafts . . . classrooms are never stuffy. Health built up through the summer will be protected through the fall and winter.

No matter whether your school is old or new, Sturtevant Unit Heater-Ventilators will fit in nicely. See how other schools are employing them . . . send for Catalog 361.



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*Armstrong's expert workmen installed this Corkoustic ceiling with beveled edges and painted with two spray coats at Stedman School, Denver, Col.; architect—G. L. Bettecher.*

## CORKOUSTIC gives an EXTRA SERVICE, decorators say

COMPACT rows of desks—a stolid band of blackboards—scattered maps, books, and papers—it *does* seem difficult to make a classroom look attractive. But decorators say that Armstrong's Corkoustic on ceilings and walls gives a sprightly touch to brighten rooms and inspire teachers and pupils.

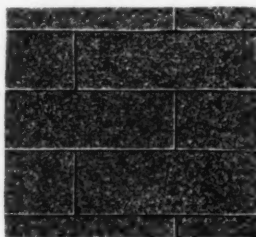
Perhaps you have already seen some of the decorative effects achieved by the installation of the firm, strong cork panels, applied direct to ceilings and walls. For rooms that need sparkle and color, spray coats of cold water paint in stencilled designs can be applied. For more conservative rooms, the natural Corkoustic surface in blended browns assures a pleasantly quiet appearance.

In design, too, the opportunities of the decorator are almost unlimited. Corkoustic is available in sizes from 12" x 6" to 12" x 36".

There are several types of surfaces. And a choice of finishes.

But even with this decorative advantage—this extra service—architects will remind you that Armstrong's Corkoustic is most important in schools and colleges as a noise-absorbing and comfort-giving material. With the installation of the permanent cork panels, adequate sound quieting and acoustical treatment are assured—in classroom, auditorium, cafeteria, corridor. And comfort is secured, since cork is the finest insulation. There is a definite fuel saving each heating season.

For complete information we'd like to send you the book, "Acoustical Correction." Later, if you like, our engineers will be glad to consult with you. Just write to the Armstrong Cork & Insulation Company, 939 Concord Street, Lancaster, Pennsylvania.



*Armstrong's Corkoustic is applied direct and quickly to ceilings and walls.*

# Armstrong's CORKOUSTIC

*for the acoustical treatment of all buildings*

# Another Indiana School Adopts BUCKEYE HEATOVENT VENTILATION

MAPLE AVENUE SCHOOL, TERRE HAUTE, INDIANA

Architects: George Stoner & Co., Terre Haute, Indiana

Engineer: R. A. Stuart, Terre Haute, Indiana

Heating Contractor: O'Laughlin Bros., Terre Haute, Indiana



Notice the intake openings under the windows in the picture above? That is where the fresh outdoor air is drawn into the class rooms. These openings indicate that the health of pupils and teachers has been given prime consideration by the Architect and the School Board.



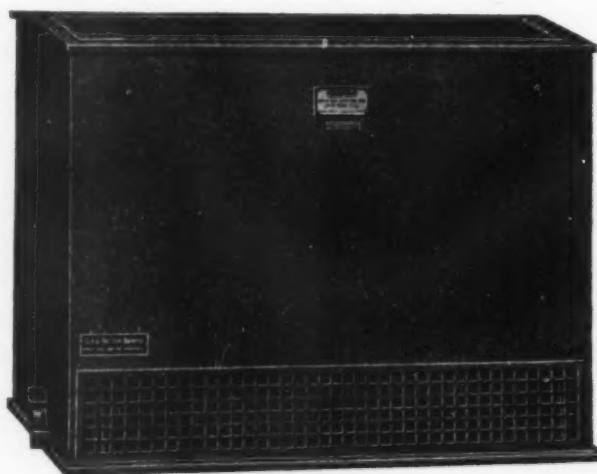
See the Buckeye Heatovent under the windows? This unit assures the pupils and teacher, who spend half of their waking hours in this room, of a continuous supply of fresh, blood purifying, properly warmed air.

Write for  
Illustrated Bulletins  
124 and 126

In the Auditorium it is especially necessary that a sufficient volume of fresh air be supplied, for here will gather a large number of pupils. The larger the number people in a room, the greater the need for fresh, filtered, life giving air.

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Warmed Air~ Diffused Air  
Supplied by

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***"Equal and exact justice  
to all men of whatever  
state or persuasion"***

*—Thomas Jefferson*



ON state occasions when your schoolrooms become public meeting places, supply your audience with uniform seating comfort. Give them the joy of sitting in Royal Folding Chairs, with their saddle-shaped seats, comfort-curved backs and silent rubber feet.

What greater assurance of "equal and exact justice to all men" than this modern Royal method of seating?

Royals change tension to attention, and are the strongest, too.



*Seats of saddle-shaped steel, wood slat seats, wood veneer or upholstered.*

*Noiseless rubber or glider feet. Supplied singly or in sections of two or more chairs, as required.*

**THE Royal CHAIR**  
*"Another Lifetime Chair"*

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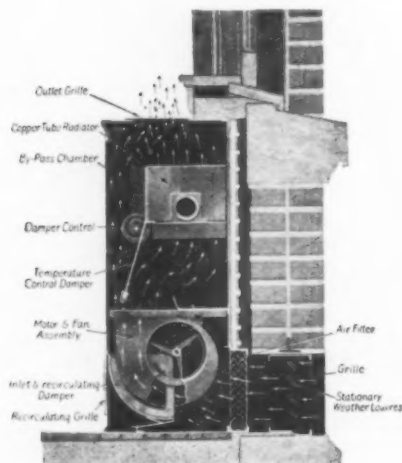


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heating *and* ventilating  
Units . . .

you really buy *comfort*  
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*Universal Heating and Ventilating Units are Quiet in Operation, Dependable, Reliable and Pleasing in Appearance.*



**U**NIVERSAL UNITS provide a highly efficient, economical and dependable method of supplying classrooms with regularly-changed, clean and wholesome, heated air. They represent a sound investment not only in heating and ventilating equipment, but also in *comfort and health*.

Universal Units deliver a vertical discharge of air heated at just the required temperature, constantly and quietly. There is no overheating, no underheating; no drafts or stuffiness. Universal Units have been designed and constructed to meet every heating and ventilating requirement and to give years of reliable service.

Universal Units can be applied with complete satisfaction in the large school and the small; in the new and the old. They are being installed in increasing numbers in many of the nation's leading schools. They are recommended by prominent architects throughout the country.

The American Blower Branch Office near you will be glad to give you complete information. Ask for the list of prominent installations, or catalog and engineer's data book. There is no obligation.

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DEVOTED TO THE APPLICATION OF RESEARCH TO  
THE BUILDING, EQUIPMENT AND ADMINISTRATION OF SCHOOLS

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VOLUME VI

SEPTEMBER, 1930

NUMBER 3

## Makers and Critics of School Policies

*The early statesmen insisted that it was the aim of education to train everybody in politics. How far have school men to-day strayed from that original aim!*

BY WILLIAM McANDREW

THE esteemed editor of this progressive periodical says, "Let's stand up and look around. Who are policy makers of American education? What ought they to be doing?"

I know who undertook to make our policy. Washington discussed with Hamilton the means of maintaining the republic that had been set up after the confederation had nearly gone to pieces. The result of their deliberations, issued as the president's own, was the familiar insistence that it is of primary importance to educate all the people in order that an always enlightened public opinion may guide our common affairs.

We need not be told that there was a common understanding that everybody would have to be trained in politics. You can quote Franklin's demand that education must be directed toward public, not private, benefit, or Adams' view that schooling at public expense must be directed toward civic duties, or Madison's and Monroe's similar dictum that we are to be governed by the voice of the people and must have a public school system devoted to teaching all the governors how to govern. You are familiar with Jefferson's proposal that it is necessary to have universal education so conducted that our youth may learn what is going on now and be inclined each to make it go on in the right way. You know that Jefferson worked out a complete plan of public education according to that policy and that Benjamin Rush set up a curriculum devised to realize

the ideals set forth in the Declaration of Independence and the Constitution. You have been told that there were twelve different public education syllabuses framed, some by eminent lawyers, one by Noah Webster, one by Du Pont de Nemours, each outline assuming that the public school would be particularly a preparation for politics, which, in this country, means the promotion of the common good.

You know that the absurd emphasis on state rights, which had threatened our having any union at all and which, in these days, prevents education from getting Federal recognition such as is bestowed on agriculture, labor and war, kept the framers of the Constitution from putting their common educational policy to work. But you also know what the founders intended by the fact that, in the same year the Constitution was made, the congress had to frame laws for its territory out of which later came six new states. You can sense the national intent from the fact that this law of 1787 provided funds for schools in order that good government should be taught. The more you browse among the multitude of pamphlets of their day, the more you mark the intense conviction of the makers of the United States that the Republic could be preserved only by protecting itself with civic intelligence, universally diffused by means of public schools administered with politics as an aim.

French Strother, when he was editor of the



Underwood &amp; Underwood

*World's Work*, seven years ago, sponsored an interesting canvass to ascertain whether this original purpose of American education persists. That magazine inquired of governors, senators, editors and others whose business it is to think public-mindedly, what should be the purpose of the American public school. You will find the answer in that periodical in September, 1923, under the title, "The Success of the Successors." It is so timely, now, that you will find it worth your while to drop into the public library and ask for the article. The significant thing is the unanimous opinion of these widely scattered respondents that the preponderating duty of the public school is political. The men most prominent in setting up our new form of union, the founders whom our five successive generations have agreed to acclaim as heroes, wanted the nation to endure. They selected public education as the safeguard of pure politics. The schoolmaster must make this his direct and chief business. This is what representative men outside of the school affirm in this present.

On the other hand you have opinions like that of Dr. George Cutten, the brilliant and incisive president of Colgate University, who considers the utterances of slave holding, tax dodging hypo-

*"The whole public pays me my wages as a school man. If I neglect direct training in those duties which are clearly the most germane to maintaining and improving our democracy, I am neglecting that for which I was hired."*

WILLIAM MCANDREW.

crites who put forth the Declaration and Constitution, scarcely binding on us to-day. They guessed wrong when they devised their scheme of an electoral college to choose a chief executive for the country as a result of a careful weighing of the virtues of the best men. What the fathers expected in 1787 that education should do, ought not, in this entirely different civilization of 1930, to bind us. Is that so?

Wait a minute. The framers said that to secure the rights of equality, life, liberty and happiness, to ensure the duties of union, justice, tranquillity, defense and general welfare, we pledge ourselves, and we propose schools to train our children in the same obligations. That is a binding obligation, is it not? Written into our two fundamental laws? So long as we accept any of the advantages of a society with police protection, water works, sewers, sidewalks and other advantages, we honestly are obligated, are we not, to see that the children sent to us receive an adequate saturation of the obligations to which the two old preambles bind us.

But, as Theodore Roosevelt said to the Ithaca boys in his speech, that isn't all. The cost of education is not gathered by taxes from parents merely. The whole nation, married and single, parents and childless, is paying for the schools. It is not a philanthropic charity. It is for a national purpose, namely, that the whole community may be served. Schools are not for the personal benefit of children, but for the general welfare of all persons. That is, they represent a social, civic, political good, one not much concerned with scholarship or individual success or the amusement to be had in the dramatic club, but with a tremendously sober duty to contribute to honest, efficient public service.

The whole public pays me my wages as a school man. If I neglect direct training in those duties which are clearly the most germane to maintain-



ing and improving our democracy, I am neglecting that for which I am hired. This is also true of you, is it not?

Did you ever search the archives and read the arguments of the men who finally had our education made a public expense instead of a charge upon parents? You recall the old objection that to take Jones' money to educate Brown's children is unjustly to deprive Jones of his property. Have you noted the identity of the reasoning in

*"The cost of education is not gathered by taxes from parents merely. The whole nation, married and single, parents and childless, is paying for the schools. It is not a philanthropic charity. It is for a national purpose."*

THEODORE ROOSEVELT.

Illinois, in Michigan and in the other states when they were urging the adoption of the common school laws almost one hundred years ago? How similar the arguments are to the plea of Thaddeus Stevens in Pennsylvania, that the free public school is not compulsory charity but a necessity for the realization of the aims of the Constitution, to wit: that we shall promote union, justice, tranquillity, defense and general welfare.

Those who first caused the laws to be adopted not only prophesied but promised that we teachers would reduce crime, abolish riots and lynchings and purify politics. They promoted the schoolmaster from the post of mother's helper to that of an officer of state, as much the protector of the nation as any soldier is. The idea appears here and there before 1776. The Spartans realized it in a form beyond anything any important American proposes; but our framers of free school legislation certainly had much of its spirit and they set up a model admired and imitated by the statesmen of every civilized country. The intent is schools for training in good government, that is, politics.

The writers who give us information on the adoption of teaching as a political safeguard emphasize that the Revolution intended to change education from a private advantage or a religious adjunct to a public, civic concern. The promoters of the change were not schoolmasters but statesmen.



Underwood & Underwood

What were the pedagogues doing? The only one I can find worth his salt was Nathan Hale. Patriotic acclaim has given us one teacher on a pedestal. His educational policy, if we may be allowed to apply his own words, seems to be that the teacher should give his life to his country. You and I know hundreds who are in the public schoolroom giving the best of themselves to their specialties. The curious thing about it is that the devotion they show is to some scheme or other remote from the direct kind of civic teaching the original promoters of our free school proposed. What educators are working on, if we are to listen to President Lotus Coffman, University of Minnesota, is "an entire program crippled by tradition. Either the American schoolmaster must assume the making of a real American procedure or outside pressure will do it." Outside pressure has done more than inside enterprise to make education civic. None of the twelve men whose educational proposals made

such a brave start in the infancy of the nation was a schoolmaster.

Horace Mann, a congressman, remonstrated that not scholarship but citizenship is the proper aim of public schools and so had the majority of Boston teachers opposing him. The requirements for teaching American political ideals, for studying the Constitution, for employing as teachers only citizens who have taken the oath of allegiance or have been born and nurtured in our country, have come mostly from laymen. Protests against such laws have issued from educators' conventions. Fred Hunter estimates that less than one-tenth of our human raw material in America is trained for citizenship. Boyd Bode is disappointed to find that "in our political life the absence of educational leadership has been conspicuous. Democracy has not been translated into educational theory and practice. We are still in the woods."

When Ross Finney makes a study of American education he comes through with a conclusion that "other and inferior aims have diluted the civic spirit." Then comes that grand old sage, Edward Copeland, with the classic, "Natural Conduct," which the Stanford University Press has just brought out. "Public education, which costs so much," he says, "pays utterly inadequate attention to duties concerned with the general welfare." We go to our conventions, we hear ourselves coddled and told we are the salt of the earth. I wonder whether that sort of pap is giving us strength to furnish the strenuous effort which the majority of those who give thought to our national affairs insist must be made. James Henry Robinson is one of those who hold that "our education is one of the sad failures of our history. The education America needs is so different from what we have, that it will require to be called by another name."

#### *Ideals Pushed to the Wayside*

That tremendously in earnest physician, William Smith, who considers that school men represent a force that might remake society in one generation finds that what we do in school "is so far removed from what the statesmen who made the whole public our paymasters expected we would do, that the main reason for our existence is none at all. You might more honestly tax only parents for the training of children. The prayer of Lincoln, the bravest heart that ever was in America, that a government for people, by people, might endure, requires the best talent there is to direct the schools. It is not there. The spirit of American ideals has been pushed to the wayside while youth saunters past."

This is much like the depreciation we older pedagogues remember when Richard Grant White, Rebecca Harding Davis and other critics were studying statistics and finding that the claim of education to diminish crime was not making good. Judge Taper thought the public schools near the point of breaking down: "The lives of the children are being wasted." Edward Bok ran a series to show that the public schools are our greatest national failure. But, now, it is from our own family that the disquieting voices come. Fred Hunter, again, is soberly remarking that "we can't stand for a school system that does no more of our national job than ours does."

#### *Muckraking the Schools*

Our defense reaction instinctively urges us to cry, "Muckraking," when there is any outbreak of criticism. We would rather break the glass that tells us our face is dirty, as Will Allen charges, than wash. The physician ought not to run away when it appears that someone is sick. His preceptors often instill in him an enthusiasm that rises in proportion to the difficulty of the cases brought to him. Our doctors of education are as severe in their diagnosis as ever Mr. Bok was. Nobody who knows anything of William Bagley would think of calling him a muckraker, but it is Doctor Bagley who said only three years back that our society, of which education should be nurse and healer, is dreadfully sick: "While science has reduced our mortality rate from disease, deaths from murder have mounted steadily until America excels all other countries in crime."

Then comes Dr. Walter Robinson Smith, sociologist, saying, "Such a wave of criminality as is now upon us would be impossible if the public schools had done their civic duty," and Clyde Moore, Cornell College professor, is remarking in his "Citizenship Through Education": "The number of good citizens in America is absurdly small." Hear George Strayer, perpetual pusher for school as a producer of patriots in peace as well as in war: "We're only scratching the surface, yet. The planting of civic virtue, the cultivation of it, will never amount to much if we keep on considering it a side issue." "The national delinquency," observes Doctor Sisson, "is due to a certain weakness in our educational system. We are not addressing ourselves even yet to the fundamental idea."

Why do I gather negations, repeating the same idea? Because so many men worth hearing say you are puttering with inconsequential aims and neglecting the big duty for which the Fathers chose you. William Carr, in "Education for Citizenship," a Stanford University publication a



Underwood &amp; Underwood

*"The schoolmaster has been promoted from the post of mother's helper to that of an officer of state, as much the protector of the nation as any soldier is."*

year old, quotes Doctor Frederick's statement that the civic teaching in high schools, in the grade of public education where intelligent citizenship should be conspicuous, because here real thinking can begin, is startlingly ineffective: "Fifty-nine per cent of the students tested hold it to be unpatriotic to admit that any country is superior to the United States in any important respect. Thirty-eight per cent believe we ought to conquer and annex Mexico. In general, the high school pupils lack sympathy, understanding and tolerance for other nations."

#### *We're Not So Much*

"We have not," remarks Doctor Carr, "come on far in the training for citizenship. We permit a pseudo-patriotism." It is almost thirty years since Paul Hanus, the head of Harvard University's school of education, dubbed the American high school, "A ship with all sails set, going nowhere."

Abbé Dimnet comes over from France to lecture at Williams College. He writes a book, "The Art of Thinking," that sweeps into the rush of American best sellers. As a foreign teacher, his comment on us has at least perspective: "The product of present schooling in the United States, as I judge from a study of American newspapers of 1850, is not so well educated as the average citizen of this Union eighty years ago. You are not training your boys to think about the things that matter." When Charles Prosser and Charles Allen survey us as we are to-day their remarkable book, printed by the Century Company, bears

the title, "Have We Kept the Faith?" It savors of disappointment, regret and blame. But it is remonstrant, corrective, hopeful and inspiring: "The public schools, organized and supported to keep democracy healthy, are run as though the patriot fathers had created a plan that will run itself. God will take care of it, somehow. Meantime, more and weightier thinkers are becoming dissatisfied with the failure of the school to address itself to the problems of democracy. The few educators who realize our fatuity are like the Greeks in the wooden horse. They need to unite with the enemies of educational neglect who are outside of our pedagogical walls."

I find Duncan Yocum, professor of education, University of Pennsylvania, to be, after an intensive study and a wide correspondence on democracy, keenly disappointed at what we have done with the main group of our duties. "So long," he says, "as so many Americans prefer to vote for politicians who give them picnics and to ignore the one who gets clean streets, efficient policing and an honest spending of public money, we must conclude that there is something radically amiss with the schools through which our citizens come."

Especial significance, I think, is due to the recent Harvard address by Thomas Briggs. The New York and Boston papers say it made a sensation. John Finley wrote a spirited editorial praising it in the *New York Times*. You who know Briggs rate him as of the careful sort who will not say that two and two are five or even four and a fraction. His "Great Investment"



which the Harvard University Press has printed, surveys the questioning of public schools by parents, citizens and publicists: "America, after declaring that education should be made the safeguard and promoter of democracy, sat back and awaited the millennium. France, Italy, Germany, Russia, show us what our schools could have done to inculcate our political ideals which are still so much better than theirs, but practically neglected in the public school." It is the latest, most careful, least vindictive or despairing survey of American education I have seen. It is an honest recognition of failure, an enthusiastic praise of successes, a resolute working out of the creed of democracy, with no hullabaloo for a "Briggs Plan" or any attempt to get attention by noise or sensation.

If you have patiently read me so far as this you deserve approbation. I have tried to remind you of how we happen to be servants of the general welfare instead of teachers of boys whose parents are entitled to have them taught for the sake of the boys and their families. I have quoted so many men who find fault with the schools that you might suppose that I start with the notion that education is all wrong and then cast about to find support for the prejudice. If that is your guess, it's wrong. I have in my pack a lot of good things that you and others are doing for education. I am saving them for dessert.

#### *Training in Selfishness*

Just now we are being more than usually pushed to consider to what extent we schoolmasters are adopting the policy the founders set up for us and which the source of our salaries requires us to follow. The testimony is not strong in our favor.

Consider your own schooling and mine. I can recall the names of all my teachers from the beginning through the high school, normal college and the state university. All of these institutions were reputed superior schools. I can remember, as you can, incidents, sayings and teachings of eighteen impressionable years, but nothing related to civic duty or political responsibility, except some good, peppery stuff by Walter Hewitt, Sumner Pierce and Delbert Haff in the debating societies. But they were students, not instructors. No one as teacher or professor and drawing his pay from the taxes of the whole community, and thereby obligated to instill in us the duty of paying back what we were costing, ever mentioned the American theory of free schools or suggested that we begin doing something for the general welfare.

The motives employed by my teachers to get

me to work were intended to appeal to my self-interest, not to any advantage of my community benefactors: "You study hard and you'll get ahead." My purpose in going to school, when I had a motive, was personal distinction and success. I was tempted by prizes, by honorable mentions and by valedictorian prominence. The athletic club was for my amusement. There was no schoolboy organization for town benefit, encouraged by teachers. We accepted, without sign of even a "thank you," as Professor Charles Judd says the boys and girls do to-day, all the heat, light, comfortable buildings and free teaching that were given us, paid for by the sweat and toil of every worker in our town and we took them without obligation.

#### *Ninety-Nine Years Late*

In the normal school, paid to educate, free of cost, people who could earn their living by what was taught there, we found courses in how to teach the tool subjects but not a shred of a course in how to teach what the American purpose of the tool subjects is. Now the same Judd is repeating to his teacher audiences that to confine the elementary school to tool subjects and to be satisfied merely with skills in computation, writing, spelling and the like, is to miss the great purpose of the public school. M. V. O'Shea is giving us collected evidence that as low as the kindergarten, and lower, the social and civic duties must be cultivated.

In the university to whose support every farmer and laborer in the state was compelled to contribute, I am sure the sense of obligation to the general welfare was what Professor Morris called "an awayness." So far as I can recall, we were like those collegians of to-day whom Ross Finney finds too much in evidence: "They seek the professed aristocracy of fraternities and sororities; their thoughts are on themselves, not on their country."

Far be it from me to wish to throw stones at my alma grandmater. She came about as near achieving the educational requirement imposed on her by the source of her income as any doddering old woman approaches the proper training of youth. I look back to my happy college days as to the waste of blind-led blind.

In the next issue of this magazine, if you still have appetite, you will find what the policy makers of our schools now say they are doing and what others say it is worth. But I can tell you, right now, all the authorities say you should inject into your curriculum, as the result of teacher conferences, exercises aimed to instill into all grades ideas of civic duty and means to exercise it.

# What Major Problems Confront the Classroom Teacher?

*Questionnaires were sent to superintendents and principals as well as to teachers in an effort to determine the nature of the difficulties most often encountered in teaching. The 287 replies received are discussed*

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THE fundamental duty of principals and superintendents is the direction of the educational facilities at their command so that the type of instruction in the schools may be as effective and efficient as possible.

To accomplish this, three things are necessary: first, the provision of as adequate facilities for instruction as the available funds make practicable; second, the selection and organization of as capable a body of teachers as the means at hand permit, and third, the direction and supervision of this body of teachers so that under the conditions the instruction given will stimulate the maximum amount of learning on the part of the pupils.

It must be recognized that unless a school or a school system is pupil centered it will fall far short of the purpose for which it has been established and maintained. Great progress has been made in the material aids provided for education,

and superintendents in general function effectively in this branch of their administrative duties. Similarly, the superintendent has learned to make careful selection of teachers and has been alert to the types of school organization that have contributed to the betterment of educational activities. Yet when his supervisory functions are under discussion, the superintendent himself is among the first to admit his shortcomings and those of his supervisory staff.

In order that the teacher may receive the most effective assistance in her work, her difficulties and problems must be fully understood. The supervisor can no more disregard the feelings and experiences of the teacher in this respect than can the physician ignore those of his patient. For this reason more attention must be paid to the problems of major difficulty recognized by the teacher herself in her direct contacts with her pupils, and her first-hand impres-

TABLE I—PROBLEMS OF MAJOR DIFFICULTY AS DETERMINED BY 205 TEACHERS (MOSTLY INEXPERIENCED)

Rank		No. of Points	Importance
1.	Getting pupils to make careful preparation.....	427	(2)
2.	Adapting assignments to individual differences.....	423	(1)
3.	Getting pupils to use good English.....	267	(2)
4.	Planning assignments, including use of "unit" plans.....	229	(1)
5.	Getting pupils to correlate related subject matter.....	184	(1)
6.	Grading papers and assigning equitable marks.....	175	(1)
7.	Keeping pupils interested during the entire class period.....	173	(1)
8.	Effective drill work resulting in satisfactory retention.....	163	(1)
9.	Lack of suitable reference material.....	148	(4)
10.	Selection of suitable test material.....	94	(1)
11.	Maintaining good discipline in the classroom.....	93	(2)
12.	Lack of supplies and equipment deemed essential.....	88	(4)
13.	Getting pupils to observe the common courtesies.....	86	(3)
14.	Adapting the lesson material to pupil experience.....	84	(1)
15.	Lack of suitable text material.....	80	(4)
16.	Conducting exercises in supervised study.....	67	(1)
17.	Your own inadequate professional preparation for teaching.....	63	
18.	Getting pupils to understand your explanations.....	45	(2)
19.	Your own inadequate academic preparation for teaching.....	30	
20.	Securing good order in study halls.....	23	(2)
21.	Inadequate assistance from principal.....	15	(4)
22.	Your own difficulties in adjusting yourself to your community social life.....	10	(4)

sions on the subject must at least be considered.

The object of this study, therefore, is to determine the nature of some of the major problems confronting the classroom teacher, particularly the secondary school teacher of limited experience. It is evident that there are at least two ways of identifying such problems. One of these is to secure the data directly from the teachers themselves and the other is to get prin-

TABLE II—PROBLEMS OF MAJOR DIFFICULTIES AS DETERMINED BY 82 PRINCIPALS AND SUPERINTENDENTS

Rank		No. of Points
1.	Adapting assignments to individual differences .....	232
2.	Getting pupils to make careful preparation .....	205
3.	Planning assignments, including use of "unit" plans .....	149
4.	Getting pupils to correlate subject matter .....	99
5.	Keeping pupils interested during entire class period .....	95
6.	Effective drill work resulting in satisfactory retention .....	65
7.	Getting pupils to use good English ..	61
8.	Maintaining good discipline in the classroom .....	58
9.	Conducting exercises in supervised study .....	54
10.	Selection of suitable test material ...	47
11.	Grading papers and assigning equitable marks .....	46
12.5	Lack of suitable reference material ..	31
12.5	Inadequate professional training for teaching .....	31
14.	Securing good order in study halls ...	28
15.5	Adapting lesson material to pupil experience .....	27
15.5	Getting pupils to observe the common courtesies .....	27
17.	Difficulties in adjustment to community social life .....	25
18.	Getting pupils to understand your explanations .....	21
19.	Lack of suitable text material .....	19
20.	Lack of essential supplies and equipment .....	18
21.	Inadequate assistance from principal.	14
22.	Inadequate academic preparation for work .....	11

cipals and supervisors to express judgments based upon supervisory contacts with teachers. In this study both methods were used.

Blanks in questionnaire form listing twenty-two suggested difficulties were sent out, mostly to beginning high school teachers of Wisconsin. Space was left for other problems to be written in. A request was made that the five major difficulties be ranked 1, 2, 3, 4 and 5, and that all other difficulties be checked. In addition to this,

space for a paragraph of comments was left with the following suggestion: "Write a brief paragraph commenting on what you deem your greatest present problems, whether or not you have already checked them in the above list." More than one-half of the teachers from whom replies were received took the trouble to include this paragraph as requested. In most instances this was only an elaboration of the points they had already checked and added little except by way of emphasis.

In order to check the validity of the twenty-two suggestive problems listed, comparison was made with the material in the Commonwealth Teacher Training Study, carried out under the direction of Dr. W. W. Charters of Ohio State University and Dr. Douglas Waples of the University of Chicago.<sup>1</sup> The twenty-two items in the questionnaire compared with the determined decile ranks of this study as follows: in the highest tenth, 9; second highest, 5; third highest, 1; fourth highest, 5; not mentioned, 2. These ranks were assigned as carefully and accurately as possible, considering the great comprehensiveness and detailed analysis of teacher activities in the Commonwealth Study. However, there is no question but that the twenty-two items in the questionnaire show a close conformity with the problems of major importance usually associated with classroom teaching. In Table I the decile rating of each of the items is indicated.

#### Replies Received

Usable replies were received from 205 classroom teachers and from 82 principals and superintendents. These were received during the school year of 1928-29, including the University of Wisconsin summer session of 1929. Of the 205 teachers, 58 had had considerable experience with an average of about six years of service. Of the remaining 147, with a few exceptions, all were teaching their first terms in secondary schools. Of these, 35 were graduates of teachers' colleges, 75 of private colleges, 14 of universities, and 16 were college graduates without experience, whose observations were based on their work in educational practice. The latter group showed no discernible disagreement with the rest of the teachers and therefore did not greatly affect the final results.

In tabulating the data items ranked (1) were given a weight of 5; those ranked (2) a weight of 4; those ranked (3) a weight of 3; those ranked (4) a weight of 2; all items ranked (5) or merely checked (x) were given a weight of 1.

<sup>1</sup>Charters, W. W., and Waples, Douglas, *Commonwealth Teacher Training Study*, University of Chicago Press, 1929.



In Table I the twenty-two problems are given in the order of their frequency and importance based on the returns of 205 teachers. The total number of points indicated is based on the system of weighting given above. The rank of each item is shown at the extreme left; at the right the total number of points credited; and at the extreme right importance of the item according to the Commonwealth Teacher Training Study.

dure to which many teachers contribute little or nothing. Whether this is due to lack of information or to failure to lay adequate stress upon this important exercise must rest upon the individual.

One of the most interesting phases of this study is the shift of emphasis on schoolroom discipline. Colvin,<sup>1</sup> in a study made about 1917 comments, "In the first place, the problem that stands out most definitely in practically all of

TABLE III—THE SEVEN ITEMS OF DIFFICULTY SHOWING THE LARGEST AMOUNT OF DIFFERENCE IN THE RANKING BY TEACHERS AND PRINCIPALS\*

Importance	Ranks Assigned	
	Teachers	Principals
(4) Lack of supplies and equipment deemed essential .....	12	20
(1) Conducting exercises in supervised study .....	16	9
(2) Securing good order in study halls .....	20	14
(1) Grading papers and assigning equitable marks .....	6	11
(4) Difficulty in adjustment to community social life .....	22	17
(†) Inadequate professional training .....	17	12.5
(2) Getting pupils to use good English .....	3	7
(4) Lack of suitable text material .....	15	19

\* The numbers in parentheses to the left indicate the percentile ranking of the importance of the item according to the Commonwealth Study.

† Not mentioned in the Commonwealth Study.

A study of Tables I and II indicates a rather close agreement in most of the items. The actual computation of the coefficient of correlation between the two tables using the Spearman Rank Difference formula was found to be 0.833. A comparison of the two tables indicates a noticeable degree of difference of judgment on seven of the items, which are set forth in Table III.

It is seen that only three of these marked differences deal with the items ranked as of major importance on either list, that is, to which a rank of at least 10 has been given by the one group or the other.

It is interesting to note how much more teachers are concerned about the pupils' use of good English than are their supervisors. The same may be said of the matter of grading papers and assigning equitable grades. These are much more immediate problems to the teacher and for that reason are probably adjudged of more importance, yet principals and superintendents agree that these matters constitute significant problems as they ranked them 7 and 11, respectively.

On the other hand, principals seem to be less satisfied with the success of the supervised study program, which they rank 9, while teachers give it 16. In this matter the case seems to favor the principals' judgment, as it is apparent to the high school supervisor that a good many teachers do not give sufficient attention to the technique of directing study. The result is a routine proce-

these papers (100 replies) is that of discipline." A recent study by Dr. A. S. Barr and Mabel Rudisill<sup>2</sup> of the University of Wisconsin School of Education likewise indicates that discipline is still a major problem with inexperienced teachers. This difficulty is mentioned in 40.5 per cent of their replies as being encountered at the end of the first two weeks; by 32.5 per cent about the middle of the first year and by only 16.6 per cent during the second year. The opinions of principals regarding difficulties of first year teachers show a frequency of 53.4 per cent. It must be borne in mind that Doctor Barr limited his study to the graduates of the University of Wisconsin. Furthermore, the tabulation is based on frequency alone and no attempt was made at ranking or weighting. However, in the present study, on making a recheck of the replies of principals and superintendents, I found that discipline is mentioned in only 26.8 per cent of the replies.

A glance at Tables I and II indicates that the problem of classroom discipline received a rank of 11 on the teacher list and 8 on that of the principals and superintendents, a difference of 3 points. Securing good order in study halls was ranked 20 by the teachers and 14 by the principals, a difference of 6, probably due to the fact that experienced teachers rather than young

<sup>1</sup> Colvin, S. S., In *Introduction to High School Teaching*, pp. 395-404, The Macmillan Company, New York City.

<sup>2</sup> Barr, A. S., and Rudisill, Mabel, *Inexperienced Teachers Who Fail—and Why*, *The Nation's Schools*, February, 1930, pp. 30-34.

teachers are chosen for this duty largely because of their particular fitness. If the points assigned to discipline in classrooms and study halls are added, discipline will occupy rank 10 instead of 11 on the teachers' list and 6 rather than 8 on the principals' list.

The replies of the teachers indicate that more attention devoted to keeping pupils interested in their work and to the adaptation of assignments to individual differences and more emphasis upon motivation of the work of pupils as individuals tend to minimize the problems of classroom management and discipline. Nevertheless, it is clear that principals are not exactly satisfied with the results obtained, as indicated by the higher ranks assigned by them to matters of discipline. Hence, one must conclude that pupil control is a matter that continues to demand careful attention on the part of teachers.

The greatest difference of opinion between teachers and principals concerned the lack of necessary supplies and equipment. According to the viewpoint of the administrators, teachers overrate this matter. The question may be raised: "Who is the more nearly right?" The only available study that seems to throw any light on the subject is the one made by Anderson, Fowlkes and Jones.<sup>1</sup> As shown in this investigation the wide variation in amounts spent for instructional supplies and the lack of standardization in supplies for the various grades and departments furnished by boards of education appear to indicate that there is some justification for the teachers' opinion of inadequacy in this respect. A closer examination of the replies also reveals that this matter of lack of supplies and equipment was given a higher rank by teachers of such special subjects as history, chemistry, agriculture and home economics. From this one might conclude that administrators are not always fully conversant with the needs of such special departments and it may be, too, that the teachers do not impress sufficiently upon their principals the specific needs of their departments.

#### *Lack of Reference a Handicap*

This conclusion agrees with that of Doctor Barr, in which he states: "It is interesting to note that while more than 16 per cent of the teachers gave lack of reference books and materials as a specific handicap in teaching, this difficulty was not listed by the principals."

Another of the more prominent disagreements between teachers and principals shown by this

study is the matter of adequate professional preparation, which the teachers rank 17 and the administrators rank 12.5. It seems plausible that the judgment of principals and superintendents should be more valid on this point, because of the scope of opportunities for observation afforded them in their supervisory activities. Then, too, in their personal visitations at teacher training institutions in quest of teachers they become better informed on points of difference in professional training both as to content of courses and efficiency in their administration. On the other hand the alma mater loyalty on the part of teachers is often so strong that no question of fallibility arises. They take for granted that their preparation has been fairly adequate.

#### *Is the Present Program Inadequate?*

At this point one could raise the question that lies at the root of the whole problem. Is it not possible that our present program of teacher training is inadequate and must remain so until the problems of learning and teaching are more fully understood? Whatever merit this paper may have must be judged in the light of its relation to the larger problems of teacher training. Its bearing upon this matter, limited though it may be, will be pointed out later in the article.

The last of the problems listed in Table III on which there is a difference of opinion deals with the teacher's adjustment to the community social life. Teachers place this at the end of the list, whereas principals and superintendents rank it 17. A number of principals make pointed comments on this score, one of which is quoted: "Teachers fail to realize obligations that extend beyond the classroom and often feel that there are no community obligations as such." Whatever the relative importance of such comments may be, it is a matter of common knowledge that many teachers have little group or social life outside the small organizations to which they belong and which are more or less confined to their own number and a few of their intimate associates. The cause of this limited community contact or how general it actually may be is not within the scope of this study.

Thus far only the differences in opinion between teachers and their supervisors have been stressed. The agreement between the two groups is much more significant. This has already been emphasized by citing the coefficient of correlation, which was found to be 0.83. This is surely good objective evidence that teachers are fully aware of the problems that are regarded as fundamental in importance. A comparison of Tables I and II shows almost complete agreement on the first ten

<sup>1</sup> Anderson, Fowlkes and Jones, Study of Budgeting and Allotment of School Supplies, Bulletin, University of Wisconsin School of Education, 1929.



items with little difference in the ranks assigned. In order to focus attention upon these ten problems of major difficulty recognized by teachers and principals, they are listed in Table IV.

A glance at this list indicates that the point of view of both classroom teachers and supervisors is pupil centered, that is, the problems of teaching must concern themselves with the individual pupils in the group. The individual pupil is to be dealt with as he is, and must be led to do those things and pursue those activities most conducive to his own development in relation to his physical and social environment. What these things and activities are to be must be determined and set forth in terms of clear and concise objectives. It is not the purpose of this study to deal with the formulation of such objectives. Their existence is implied in most of the ten items listed in Table IV upon which there is agreement. This study is more concerned with the craftsmanship of teaching and assumes that principals and supervisors understand their leadership and are seeking to understand more fully the fundamental objectives of secondary education and to cooperate with teachers in the proper formulation and application of such objectives.

#### *General Method Problems Are Listed*

The ten problems listed are problems of general method, which, however, must be dealt with in specific situations associated with the various teaching fields, such as science, social science, language, manual arts, as well as with general problems of pupil behavior and group activity. It is necessary to inquire more fully and thoroughly into their meaning. What is it to get pupils to make careful preparation and how is it to be done? If it is true that adolescents crave activity, it follows that if they are inactive the subject matter lacks the proper stimulus or challenge. The trouble may be one of content or it may be one of method, which in either case may rest upon the teacher's failure to understand the adolescent himself. To adapt the lesson to individual differences involves an understanding of what these differences are. This likewise involves a careful study of the individual which must be founded on sound psychology and for which a workable technique must be formulated, probably along the line of Morrison's case studies<sup>1</sup> or Reavis' procedures described in his "Pupil Adjustment."<sup>2</sup>

In like manner each of the other problems must be attacked and a suitable procedure

evolved. Such teaching procedures can be effective only insofar as they are applicable to the learning processes of the pupils which they are to stimulate and which must first be understood. An involved analysis of processes and procedures is not sufficient. Analysis without rational synthesis gets the teacher nowhere, even if the educational research worker thrives on it.

TABLE IV—TEN PROBLEMS OF DIFFICULTY IN TEACHING UPON WHICH TEACHERS, PRINCIPALS AND SUPERINTENDENTS AGREE\*

Rank	Ranks by Doctor Barr
1. Getting pupils to make careful preparation (Motivation) . . . . .	4
2. Adapting assignments to individual differences (Provisions for individual differences) . . . . .	2
3. Planning assignments including use of unit plans (Making assignments†) (Presentation of subject matter) . . . . .	3
4. Getting pupils to use good English (Not mentioned) . . . . .	
5. Getting pupils to correlate related subject matter (Organization of work and teaching materials) . .	5
6. Keeping pupils interested during entire period (Teacher and pupil participation in the recitation) . .	8
7. Effective drill work resulting in satisfactory retention (Adjustment by teacher to classroom situation)	10
8. Grading papers and assigning equitable grades (Measuring achievement) . . . . .	7
9. Lack of suitable reference material and supplies (Conditions for work) . . . . .	6
10. Maintaining good discipline in the classroom (Control over pupils) .	1

\* Statements in parentheses are from the findings of a similar study made by Doctor Barr (see footnote No. 2, p. 29) with ranks as found by him at the right.

† On account of a difference in terminology it was difficult to fit in some of the items. However, except in the matter of pupil control, the amount of agreement is high.

It is evident that the listing of these ten or more problems is in itself of little value. Yet if these are truly the guideposts that point in the direction in which the teacher's specific difficulties lie, we are at least "hot on the trail." What indication is there that this is the case? Evidently the terminology of the questionnaire has some meaning to the teachers and principals. If this were not the case there could not have been a correlation of 0.83 between the teachers' judgments and those of the principals and superintendents, nor the high degree of unanimity that

<sup>1</sup> Morrison, H. C., *The Practice of Teaching in the Secondary Schools*, chapter 31, University of Chicago Press.

<sup>2</sup> Reavis, W. C., *Pupil Adjustment in Junior and Senior High Schools*, D. C. Heath & Co., Boston.



was found to exist in the case of the ten items listed in Table IV.

It may also be postulated that teachers' conceptions of their problems may change. What may be major problems to the young teacher may be entirely outside the problem category of the more experienced teacher. This appears entirely rational and should be capable of discovery and analysis. On the other hand, may there not be a common ground upon which the contents of a course in general method may be well founded? An analysis along these lines is in order.

#### *Difference in Difficulties Listed Not Great*

Of the 205 replies received from classroom teachers, all, with the exception of 7, were from the secondary school field. Among these 58 were teachers with from three to twenty years of teaching experience, the average being about six or seven years. To what extent did their judgments correlate with those of the 147 who reported no previous secondary school experience? The correlation on the twenty-two items for the two groups showed a coefficient of 0.89 based on the Spearman formula. This correlation is sufficiently high to indicate that the amount of difference in judgment of teaching difficulties is after all not considerable.

The minor differences are not hard to account for. First, they are due to differences in understanding and interpreting the terminology used. This will continue as long as educationists themselves do not agree on the use and meanings of terms. Second, the teacher training institutions differ in objectives and emphasis on procedure; for example, the graduates of teachers' colleges emphasized more the importance of effective drill work and placed more stress on getting pupils to use good English. They were better satisfied with the adequacy of their professional training, a difference of 9 ranks as compared with the college and university graduates. They were also less dissatisfied with their text material and found more fault with the lack of supplies and equipment. Third, as already pointed out, the amount of teaching experience had a considerable effect in modifying teachers' points of view. The beginners had more difficulty with the following: (a) grading papers and assigning equitable marks, a difference in rank of 7 points; (b) maintaining good discipline in the classroom, 7 points; (c) keeping pupils interested during the class period, 4 points; (d) planning assignments, 3 points. On the other hand, experienced teachers felt more keenly the inadequacy of the assistance they receive from the principal. This suggests the question: "Do principals show a

tendency to slow up on their supervision of experienced teachers to the point of felt neglect?" This study does not attempt an answer, except to make the statement that the coefficient of correlation between estimates of difficulties of beginning teachers and those of principals and superintendents was 0.806, while in the case of experienced teachers and principals and superintendents it was only 0.74. No doubt there are reasons for this difference. In the first place principals based their returns largely on estimates of the problems of beginning teachers and second, the larger numbers of cases in the inexperienced group in itself tended to raise the coefficient.

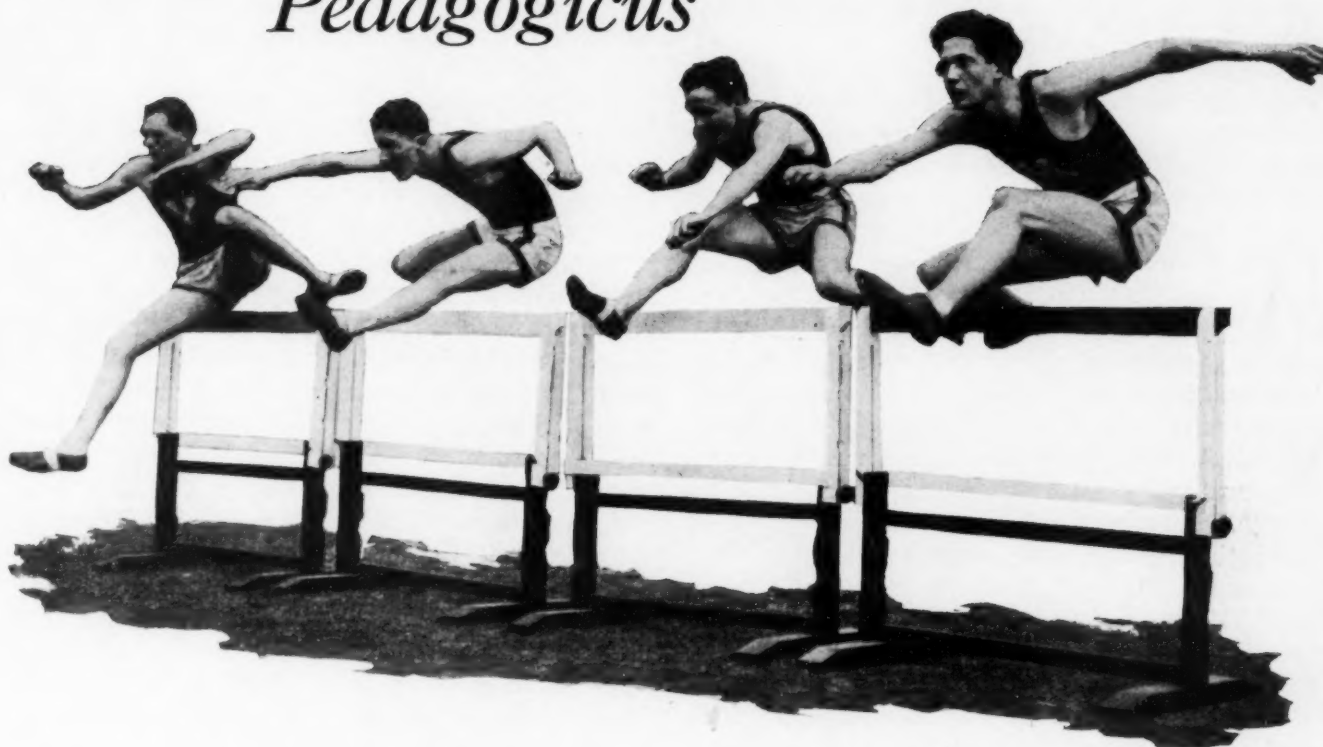
In conclusion the results of this study may be summarized as follows: There is a striking agreement between teachers and their supervisors in the recognition of problems of classroom procedure. The differences in judgment on some of the problems are nevertheless important and an attempt has been made to analyze and explain them. This study recognizes its limitations, first in regard to difficulties in providing a satisfactory terminology, and second, it makes no attempt at a specific definition of desirable objectives, but confines itself to the craftsmanship of teaching. There is no constancy in teachers' estimations of the importance of their problems. Some of the differences are due to differences in training, while others vary according to the teachers' term of service. An attempt is made to point out lines along which further study is desirable.

### How Newark Is Encouraging Creative Work Among Its Pupils

Nowhere is the truth that "the child is father to the man" more vividly illustrated than in the June issue of the *Newark School Bulletin*, Newark, N. J., which is devoted to a presentation of creative work by the pupils of the Newark schools.

The contributions of poetry, prose, music and translation and the reproductions of carving, drawing and manual work, which represent the creations of pupils from the first grade through the high school, are not only meritorious in themselves but they give promise of the distinctive work the pupils will do when they are grown. Without any doubt, there are future *littérateurs*, musicians, poets and artists who at the present are receiving the necessary impetus for their future creative impulses in the public schools of this city.

# *Morbus Athleticus Versus Morbus Pedagogicus*



Underwood & Underwood

BY HUBERT E. COYER, DIRECTOR, DEPARTMENT OF HEALTH EDUCATION, JOHN MARSHALL HIGH SCHOOL, ROCHESTER, N. Y.

THE great problem of the effects of athletics on education has provoked discussion from many angles. All kinds of theories have been advanced as to the damage done, but no suggestions have been offered as to how the situation may be remedied.

Most of the attack seems to be directed toward the athletic coach and the influence of his program upon the student body. The evil effects enumerated as emanating from the athletic program seem to many unjustified, and many feel that athletics has earned a rightful place in the curriculum. In this connection, the following statement appeared in a recent bulletin from Antioch College, Yellow Springs, Ohio: "To bring proportion into education, we must consider athletics."

The fact that the athletic coach has rendered to education an important service is realized by few educators and only by those who are willing to look upon athletics as a method of education. What has taken place in the past thirty years is appalling to those of average academic mind because they feel that athletics has now become an abuse, an intrusion and even a burlesque on education. Many recent magazine and newspaper

articles have condemned the evil effects of athletics and have proclaimed that the athletes themselves are usually superior individuals who least need this training. They further state that these so-called athletic side shows are now playing a more important rôle in education than the main circus, so large indeed that school principals and college presidents are crying loudly that the only way they can maintain the prestige of their respective institutions is to make elaborate provisions for athletics.

If it is true that athletics holds a monopolistic position in our secondary schools and colleges, this position was won fairly and in the open and by no other individual than the athletic coach himself. Here we have a graphic presentation of peaceful penetration—a man bowing apologetically at the back door of the college with nothing but an old uniform, a sweater or two and a ball full of air, and working his way through the entire student body and faculty to the front balcony where he stands to-day, a hero, attracting thousands of eager youths to the portals of the institution he is serving. To-day, there are comparatively few who really know who the president is, but all know who the coach is.

Yet what educator had the remotest idea that this apotheosis of the coach would become what it has to-day? He has been the subject of comment and criticism from every angle by educators who feel that his work is detracting from the main show.

Because of the natural interest in athletic games and contests and because of their spectacular nature, there has been a strong urge on the part of the students themselves for greater participation. So great has been this urge that in one of our large state universities a dean is reported as saying: "There are two thousand persons in this university who should not be here at all." Little did he realize that the man who wields the strongest influence over the student body and has the strongest claim for molding the intelligence and moral fiber of the institution is the coach. Perhaps he has never heard the coach enumerate the qualifications required for his course, among which are mentioned speed, strength and endurance, while intelligence is underscored. He deals with none but the "thinkers." Where is there a greater combination for moral training in the entire institution than those that the coach insists upon?

Considerable interest was focused upon a recent commencement address delivered by Roscoe Pound at Indiana University when he said,

"Study tends to become a perfunctory ritual and learning a vanishing tradition in an atmosphere of organized athletics and campus activities and social functions which are coming to call for the best inventive resources and most solicitous thought, and larger expenditure of time on the part of the teacher and the student." How tragic it is that intellectual waste is being recognized in the classroom at this late date while in the stadium joy reigns unconfined. We ask here why so supposedly capable a body of men as educators ever got themselves into such a dilemma?

Why did they allow the coach to grow under the strong light of popularity that was focused upon him until he became the supreme master of the collegiate athletic world and a serious claimant to the place of the main moral and mental force as well, when it is their business to support and defend all that goes on in the institution? They allowed the coach to stand out on the front balcony and be received with open arms believing that his work was for the good of the school, and then when they beheld its shadows overwhelming them they had not the courage to stop him. This perhaps has been the weakness in academic systems in every place from which complaints are heard. They have opened a breach, *morbis ath-*



Underwood &amp; Underwood



*leticus* found it and there was not enough vitality to resist. On the other hand the many thousands who have come in contact with the disease have been so benefited that they are eager boosters and will jostle each other about in an endeavor to part with their money to obtain the coveted pasteboards that give them the right to witness the spectacle of an intercollegiate contest to which thousands have been converted.

The truth is that neither the coach nor athletics is to blame for the decline in studies or the loss of popularity of study. The real cause lies in the teachers themselves, in *morbis pedagogicus*. In other words many have lost the real art of teaching. In fact few teachers possess the art of teaching as it is employed by the coach. He has merely made his advance by a system of small classes that permits the intimate contact that is essential in dealing with the quick mind of the American youth. He merely adopted a system that had long been discarded by the teachers themselves and revamped it to his liking. His growth and development have been gradual, from crude beginnings. He had accumulated experience and knowledge as he went, steadily improving until to-day scores of colleges have seen fit to offer courses in athletic coaching for which credit is given. The popularity of these courses seems to indicate they are here to stay.

In many of our academic institutions the fashion of education to-day is for the students frantically to scribble down on sheets of paper what the teacher says, or as much as they can get in his touch-and-go method, swallow it undigested and then try to regurgitate it on examination day. This fashion has been deplored by many who question whether the minds of the students have even been touched. These ravages are hardly memories to many who find lecture notes accumulating so rapidly that they have hardly time to look them over. The few who still consider education as a cultural end are lost among those who try to make some meaning out of this great mass of unrelated material. In fact they vainly try to cover in about three years' time what Socrates probably would have taken ten years to cover. In many schools Greek is a faint

memory, while Latin, because it still has some value, is given a little more consideration. In English the students gallop past so fast that they hardly have time to learn the names of the authors they are studying. In the sciences they have hardly time to scratch the surface and get below the outer layer.

*Morbis athleticus* is proclaimed by many as a



Underwood &amp; Underwood

disease that has produced dangerous evils in our academic system and that is the cause of riots and drunken orgies of the students. If there is any sight more disheartening than the spectacle of freshmen trying to behave like adults, it is the contemplation of adults trying to behave like freshmen on class day reunions. This comic anachronism of class reunions to many is an impressive exhibit of the real worth of higher education. "You have learned," said a university president to a graduating class, "to distinguish between the permanent and the trivial, the real and the false joys of existence." His complete absence of irony leads us to believe that he must

have spent the preceding twenty-four hours in a soundproof cellar out of eyeshot and earshot of the alumni who had returned for a hilarious celebration of their nth reunion. Their behavior seemed to be for the glory of the institution that taught them to distinguish between the permanent and trivial joys. We conjecture that the evils they attribute to athletics existed long before the athletic coach reached the front balcony.

#### *Coach's Teaching Methods Commendable*

*Morbus pedagogicus*, properly diagnosed, is the art of spraying information over the students to catch-as-catch-can and hold until examination time and then to bluff their way through. This method of learning is in decided contrast to that employing the intimate touch that invites confidence and teaches one how to think. As we observe the coach at work we note how particular he is with regard to detail and performance when he recognizes individual differences and how he makes the corrections necessary or gives encouragement when needed. He does not hurdle over problems, expecting the students to pick them up in passing. We are at once attracted by the infinite pains he takes with each individual and the minute details he insists upon. He repeats and repeats until the repetition has produced the smooth working team that results in success. If our teachers were to teach their subjects as the coach teaches track, football or baseball they, too, would discover latent ability and shy talent. If, having discovered this ability and talent, they would teach accordingly perhaps we should find an upward trend in the curve of achievement.

We believe that the athletic coach should be praised, for he has shown us the way. He uses the methods once used by the teachers and has achieved outstanding success. The coach employs a real method of personal give and take in his pedagogy that differs decidedly from the teacher who merely lectures. He has made close personal contact possible by the direct meeting of two minds, the coach's and the student's, together with a study of the third mind, the author's, in a broad understanding to distinguish between the author's meaning and his words. His methods are to be commended for he has done education a noble service. He has shown education what to do now that athletics has been allowed to turn the main channel of academic interest from the classroom to the athletic field, and that is to make the studies just as attractive.

Why not allow the teachers to copy the coach's methods of intimate personal contact with the students and employ his technique to make their courses as interesting as athletics has been made?

## School Indebtedness Gives Promise of a Decline

Public school indebtedness now totaling \$2,158,148,666 in forty-three states is believed to have reached its peak and will hereafter recede, David T. Blose of the statistical division, United States Office of Education, stated recently.

Although the school debt in these same states increased approximately \$250,000,000 between 1926 and 1928, Mr. Blose said, there are indications assuring a recession.

The huge debts accumulated by states in promoting education largely involve buildings and equipment, most of which represent an expenditure in postwar times when building materials were very costly. Within the last ten or fifteen years, Mr. Blose continued, to meet increasing demands brought about by changing conceptions in education, extraordinary burdens have been placed upon the educational systems of the states.

Educational expansion came at a time when people, because of the war and postwar spending habit, were willing to launch effective programs of improvement at once, and hence issued bonds involving great sums of money.

Now that the pressing needs have been met, it is expected, Mr. Blose said, that normal processes in maintaining education will make it possible for states to curtail their debts. Meanwhile, as this adjustment appears, building costs have declined somewhat and this provides for a saving in the future.

## Flying Professors Carry Instruction to Teachers in Four States

Extension courses by airplane are now being offered by New York University to teachers in towns in New York, Massachusetts, Delaware and Maryland. Professors from the university will literally "fly" to give educational instruction to teachers in grade schools, high schools and other institutions of learning.

John W. Withers, dean, school of education, New York University, who is sponsoring the course, says that "just as the radio is now bringing the best of music to the most remote corners of our land, soon airplanes will be carrying educational leaders to the most remote places. Just as Damrosch and his music are the regular diet of those at a great distance from the recognized music centers, so the teachers and administrative officers in the public schools are now to have the advantage of consultation with outstanding educators of America."



## *Schoolhouse Planning:*

# The Community Survey as a Basis for School Plant Development

BY ARTHUR B. MOEHLMAN, PROFESSOR OF SCHOOL ADMINISTRATION AND SUPERVISION, SCHOOL OF EDUCATION, UNIVERSITY OF MICHIGAN

WITH the relation of the school plant to the organization determined, the educational policies adopted and the method of survey selected, it is possible to proceed with the next step in the development of the school plant program—the community survey.

The character and the physical extension of public education will be determined largely by the economic, racial and social conditions within any given community. Surveys of these activities not only reveal present conditions, but they also offer a basis upon which future needs may be determined. Planning a building program without this essential basic knowledge will inevitably result in costly errors. Since a public school has a life expectancy of from fifty to seventy-five years, it may be safely built only when the future tendencies and trends have been carefully determined.

### *Three Factors Involved*

Three major factors are involved in every community study. These are (1) the economic, (2) the racial and (3) the social conditions. The method of carrying on the survey may be either directly from field studies, from existing records or from a combination of both. Procedure will be determined by the care with which the district has kept adequate records. This study might be considered profitably in conjunction with the sociological survey that forms the basis of the public relations program.<sup>1</sup> Only too often studies of this type reveal the fact that the archival records retained vary greatly both with respect to accuracy and to scope.

Each community depends for its existence upon the rest of the country. None is so self-efficient that a Chinese wall may be built around it for survey purposes and the city considered only in its narrow immediate territorial aspect. Our interdependent economic system establishes the city merely as a unit closely related to the rest of the country and, in the case of rural villages, to its immediate surrounding territory.

Since the economic survey has as one of its objectives the possibilities of future growth, it is first necessary to consider the type of community as indicated by its major economic endeavors, and then to study its location with respect to the rest of the country for those particular industries. The factors of relationship to raw materials, to markets and to transportation facilities immediately enter the scene. Some examples may suffice. The lake cities, such as Gary, Ind., Ojibway, Ontario, Detroit, Dearborn and Monroe, Mich., are all well located with respect to their source of raw materials. They are nearly midway between the iron ore of the Lake Superior region and the coal of Pennsylvania. In addition, both extensive rail and water facilities make cheap access of raw materials to the industries easy and permit a ready distribution of the manufactured products. For many years, the furniture centers have been Grand Rapids, Mich., and Chicago and Rockford, Ill. These locations were determined by the closeness to the source of the raw material, wood. To-day, the furniture industry is gradually shifting west to the Oregon and Washington coast and south to the Carolinas and Tennessee.<sup>2</sup>

### *Industrial Survey Necessary*

The decreasing supply of raw materials is forcing the change. Lack of a wise conservation and replanting program has placed these industries in the North at a disadvantage. In general, other things being equal, the industrial centers that may be expected to grow most rapidly are those that are conveniently placed with respect to the source of raw materials, where transportation is adequate and permits the easy moving of finished products to the markets. There are some exceptions to this rule, particularly in the case of mining and oil centers. Transportation must come to them or be developed especially to serve a need, such as oil and gas pipe lines. The growth of such centers is dependent upon a continuation of raw materials. The silver "ghost cities" of

<sup>1</sup> "The Sociological Survey in the Public Relations Program," *The Nation's Schools*, April, 1930, p. 72.

<sup>2</sup> The shifting of the textile industry from New England to the South is another example.



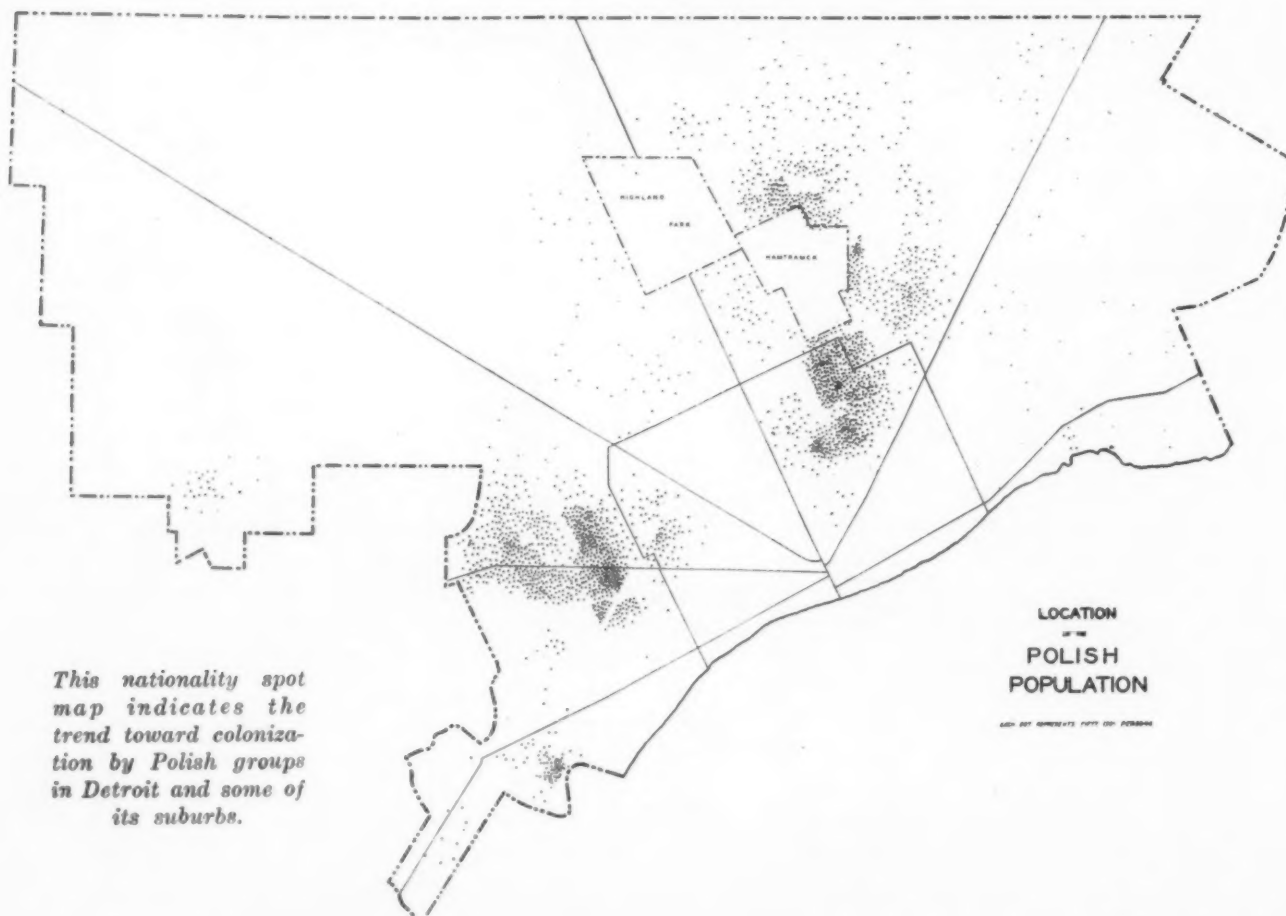
Colorado are excellent examples of such centers.

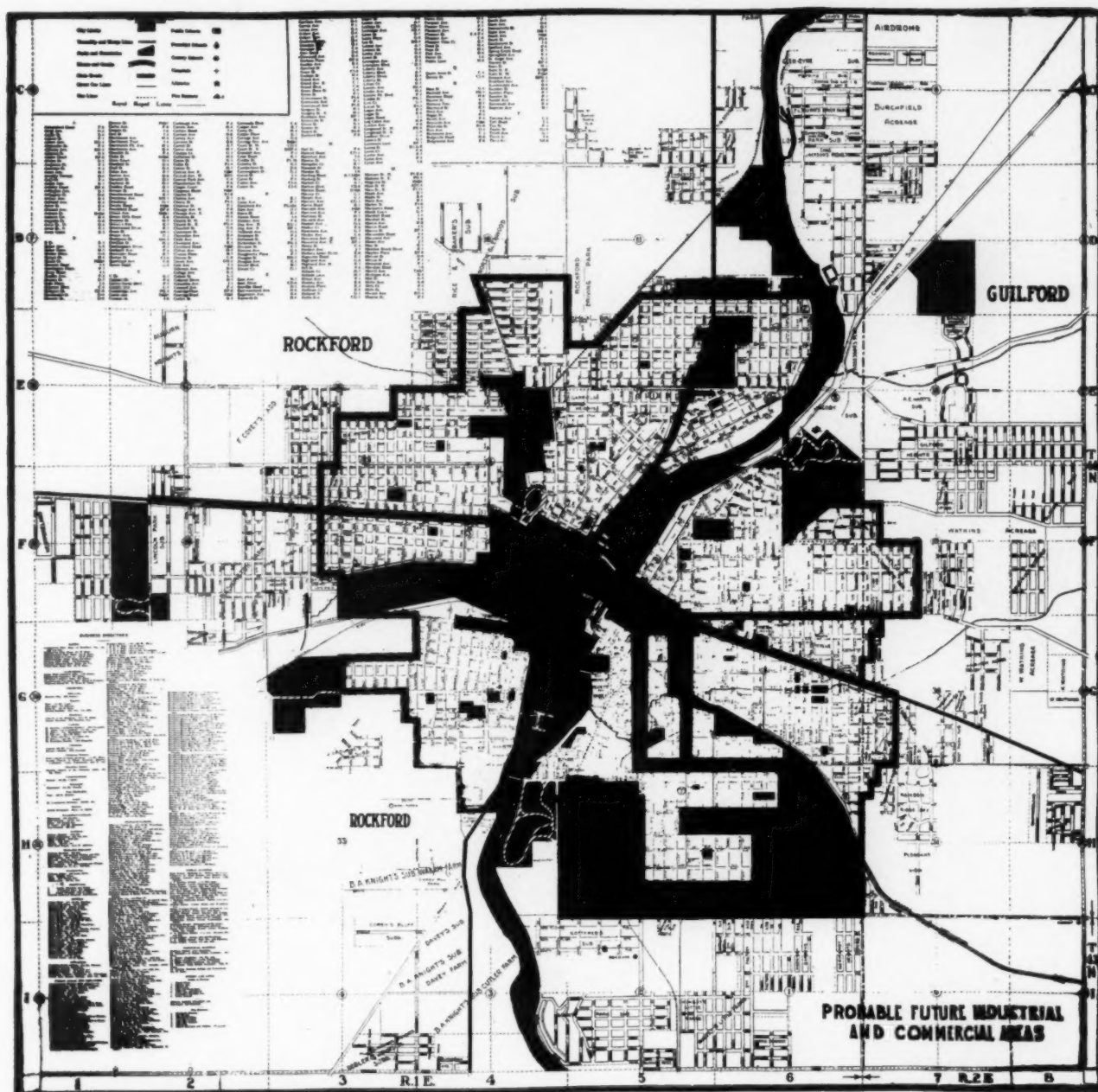
After a careful study has been made of the basic location of the community as it relates to material and transportation, the next step is an actual survey of the local industrial effort which may be interpreted to mean the way in which the community makes its living. Such effort includes manufacturing plants, warehouses, offices, stores and other activities of a commercial nature and the related facilitating agencies such as banks, all of which should be carefully tabulated with respect to type, age, size, capitalization, number of personnel and annual volume of business. Their nature and their future possibilities must be considered. They may be slowly dying industries or they may be in the infancy of development. This first consideration is essential to determine future trends. They may then be located upon a city outline map to present a picture of how they immediately affect land utilization with the city itself and thus assist in the placing of the future school plant. Practically all of these data must be secured from a field survey. Few centers maintain a continuing economic survey that will enable the administration at a given moment to produce all of the essential data. Existing conditions may be shown on the map by solid lines and probable future trends by broken

lines or by spots. The exact method of producing these maps will depend upon local and individual desire.

These collected data, together with bank clearings, postal receipts, building operations and land-use extension, present a picture of existing conditions. They also form a basis for studies to determine possible future trends. In this field, caution and conservativeness are prime requisites. Industry in the United States is in so chaotic a state that it is literally impossible to foretell with any degree of exactness just what developments will take place in the future in any except the very basic industries. The surveyor is confronted on one hand with the optimistic and rosy tinted prognostications of the "boosting" organizations and on the other hand by the actual history of industrial development and the almost lightning-like rapidity of change. Bankers and economists have not proved to be reliable prophets in this respect and the evidence is easily available to show the difficulty and danger of these plunges into the future.

After all possible factors derived from general studies outside of a given situation have been discounted, the safest method is to consider the remaining facts as determining the future trend and to plan accordingly. Location, raw mate-





*In this land utilization map of the city of Rockford, Ill., present and future commercial, industrial and park areas are combined and shown in black.*

rials, transportation and present and future markets are all vital in considering the future. Even then, if means were discovered for transmitting "super-power" from distant stations, many of these assumptions would be invalid. A mean between the ultraconservative viewpoint of the banker and the more optimistic attitudes of specialists in the several fields may be considered reasonably safe.

It is also essential to make a parallel study of employment, or an occupational survey. The best classification is that of the United States Department of Commerce. In this field, the employment of married women is significant so far as the school plant program is concerned, since the trends will indicate the relative nearness of

the nursery school problem as an extension downward of the educational program.

All of the economic data should be prepared for a period covering at least a decade. If more extensive data are easily available, they may be included, but a ten-year period is the shortest unit of time that may be safely considered.

#### *Racial Groups Must Be Considered*

Our cities represent in this generation at least a polyglot culture. Unrestricted immigration in the past has given to almost every community a strange mixture of diverse racial groups. Many of the problems resulting from this situation must be considered directly in the sociological field. Some are related directly to the school

plant program. These include racial types, distribution, family size, citizenship status, housing and home ownership, and the possible trends. The first generation of newcomers tends to colonize. The second and third generations, as they are assimilated into American culture and improve their economic status, are seriously affected by surrounding standards of social living and tend to spread. Family size also tends to decrease with succeeding generations and this vitally affects the school plant program. It is therefore of primary importance to know the numbers of these citizens, where they live and the changes that are taking place in their living conditions. For this purpose, a series of nationality maps are essential. These should cover at least ten years, or, better still, twenty years.

Nationality spot maps indicate trends toward and away from colonization. In the accompanying illustrations are shown the German settlers and the Polish in the first generation. The differences are startling. The first indicates the scattering and the absorption that are taking place; the second indicates colonization. The newly arrived immigrant, removed from a rural culture, considers children as economic assets. The United States viewpoint is that the child is the all important consideration. Observation and study indicate that it takes at least two generations before this child-ownership concept is finally changed. This factor is significant as a means of understanding and eliminating conflicts with respect to compulsory attendance. It is also closely related to the factors that affect holding power.

#### *Determining the Density of Population*

The character of the housing is also a consideration in any community. Home ownership is an indication of stability. The number of children varies greatly with the type of housing. While size of family must not be overlooked or slighted, yet the congregating of families in the mass is as important. A recent example furnishes a good illustration. On a certain plot of land, there were two cottages, four two-family flats, a six-unit terrace and two two-story singles. The total number of children in this area was forty-eight. The houses were razed and replaced by an apartment covering the same area. The new structure was six stories high and contained seventy-two apartments. The total number of children was sixty-eight. Although the average size of family was smaller in the apartments, the total for the same land area was greater than previously. The type of housing is an important factor, together with family size, in determining

the relative density of population and the physical requirements for public education.

The citizenship status indicates the degree of legal assimilation of the newcomers. It does not necessarily determine the stage of cultural absorption. These data have a bearing primarily upon one phase of adult education.

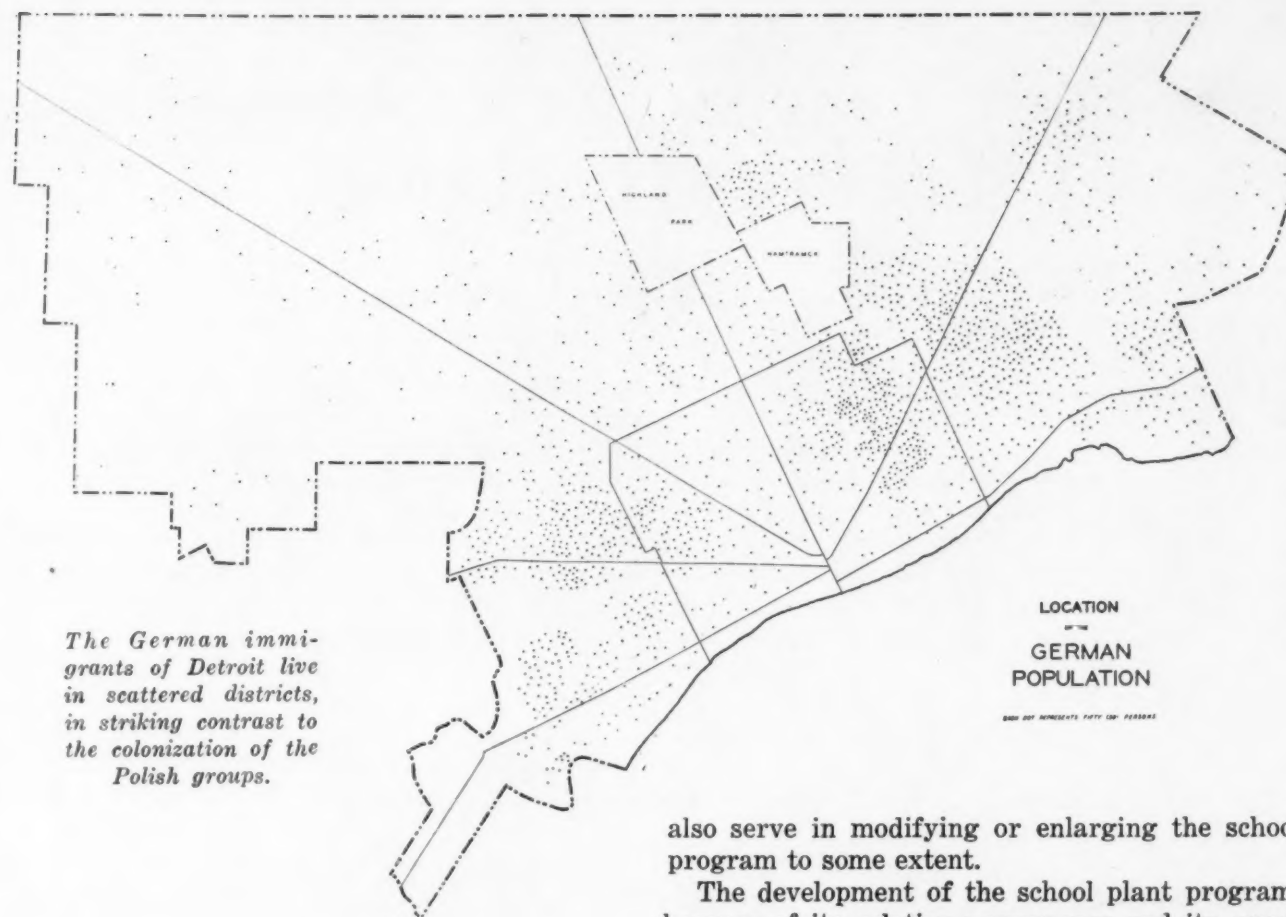
#### *Other Important Factors*

The trends with respect to the assimilation of foreign born colonists are much easier to determine than they were before the restrictive immigration laws. It is apparent that no future floods of Europeans or Asiatics will settle in uncontrollable numbers in the several industrial areas. The small flow of new immigration will form no such serious problems as those of two decades past. On the other hand, it is necessary to consider the possibilities of interstate migration, particularly in industrial centers. The Southern Negroes and the mountain whites are illustrations of what a shifting of our mobile population within the borders of the country itself may do. The process of assimilation is going on slowly, much more slowly than is often assumed, but under greater control than ever before.

Those factors grouped loosely under the major division of social conditions affect the school plant program vitally. Until a thorough study is made of these conditions, it is literally impossible to develop with any degree of accuracy the extent of the educational effort of the community. Under this head may be considered the educational levels, housing from a social standpoint, the economic status, recreation, social, ethical and welfare agencies. To be sure these represent only "high spots" or selected factors. It is necessary to delimit the problem at some point in order to come within the financial range of achievement, and as complete a development as "Middletown" belongs primarily in the field of the sociological survey and not in that of the school plant program survey.

The educational levels of the individuals who comprise the community determine to a large degree the variety, extent and breadth of the public education program. We can no longer consider public education purely as a child activity. The future requirements point inevitably to a program of instruction that will raise the general level of the adult community both culturally and economically to higher levels. The adult educational problem is only now in its infancy and promises to be one of the most fertile of future fields. No community can afford to neglect or to pass lightly over its implications.





*The German immigrants of Detroit live in scattered districts, in striking contrast to the colonization of the Polish groups.*

Housing conditions, insofar as they affect social and hygienic living, are also closely related to the problem of adult education.

The economic status of any community will determine the ability to support a generalized and expansive educational program. Wage studies, cost of living, home ownership and stability and regularity of employment must all be considered in this section of the survey. In this case, because of the paucity of institutional studies, much of this information must be derived directly from the field survey.

The presence or absence of recreation centers, playgrounds, parks, libraries and community centers will seriously affect the school program. Since these agencies are generally outside of the control of the school authorities, the extent, character and policies of these public and nonpublic activities must be carefully determined by survey. They form, as a rule, noncontributing areas and affect the location of schools to some degree. If they fit into the educational spacing plan, it is often possible, in determining the ultimate plant, to take advantage of their presence and to correlate the schools with them.

A survey of commercial recreation by type and location is also desirable.

Poverty, delinquency, crime and welfare work

also serve in modifying or enlarging the school program to some extent.

The development of the school plant program, because of its relative permanence and its great expense, is an activity that should proceed only in terms of the most objective knowledge of conditions and trends. The basic survey of the economic, racial and social conditions of any community is the base upon which the program must finally rest. Neglect of this fundamental survey will certainly result in many errors and ultimately much waste. Too much emphasis cannot be placed upon its importance in the development of the school plant program.

### A New School for Advanced Study Only

An institution that is to be devoted exclusively to postgraduate study, the first of its kind in the United States, is the new "Institute for Advanced Study," to be endowed by Louis Bamberger, formerly head of L. Bamberger and Company, Newark, N. J., and his sister, Mrs. Felix Fuld, wife of Mr. Bamberger's late partner. The institute will provide facilities with which men of learning may devote themselves to research and the training of advanced students for and beyond the degree of doctor of philosophy or other degrees.

Dr. Abraham Flexner, formerly secretary and director, division of medical education, General Education Board, will serve as the first director.

# Is a Four-Year College Course Too Short or Too Long?\*

*Does a physician prescribe a four-mile walk for each of his patients who needs exercise? this article asks. Neither should every student be confined to a four-year curriculum*

BY ARLAND D. WEEKS, DEAN, SCHOOL OF EDUCATION, NORTH DAKOTA AGRICULTURAL COLLEGE, FARGO

IN THE motivation of registrants in higher education, the public has considerable interest, for the public largely pays the bills. And because the bills in the case of state schools are tax bills in part, the citizen with reference to these is peculiarly and habitually alert and sensitive. It may be taken as a settled fact that all tax payments are faced with a truculent wariness and smothered frenzy not provoked by forced financial impositions of any other kind whatsoever.

The opinion prevails generally that there are too many registrants in college who have not the purposes and motivation of the ideal student. Some even contend that there are even too many college students who have the best of intentions. From time to time items and comment appear in the press which question the wisdom of so

much higher education and in particular the worthiness of college life and standards.

How much of the adverse criticism should receive serious attention one hardly knows. Legitimate conviction on the shortcomings of higher education may find itself in the strange company of opinion unfriendly to making college accessible to the masses; it may find itself mismated with an undemocratic tradition of the line of Governor Berkeley of Old Virginia and the landed gentry. But with the skepticism that is abroad to-day, it is well to take stock and give heed in behalf of maintaining the best repute and standards of higher education, and in the belief that universities and colleges have great power to promote what is good and needful in the world.

Alluding to the growth of university attendance, Prof. E. A. Ross writes thus in his book, "World Drift" (1928): "Did anyone dream of

\*Read before the State Teachers Association of North Dakota.



*The main entrance to the campus of North Dakota State College, Fargo, N. D.*

such attendance fifty years ago? And, while hosts of young people attend, I fear, for the sake of sports, the social life, the 'extra-curricular activities,' or because it is 'the thing' to go to college, so that many students throng in who have no craving for knowledge, no natural love of ideas, still, believe me, we do not allow any of them to waste all their time."

The quotation recounts the most commonly mentioned items of complaint as to the purposes of some who go to college. Reply to valid criticism might well take the form of greater effort to realize through evolutionary means the claims of ideas, knowledge, scholarship and proficiencies; greater effort to employ the compelling force of a vitally well ordered program and content of studies. To some extent the irrelevant motives of college attendance imply weakness of appeal or faulty procedure in the college program, more especially in liberal arts and allied curricula but to some extent, possibly, in professional curricula. Under certain conditions one will study, while under other conditions one may not.

Now why does one study? According to Arthur J. Klein, chief, division of higher education, United States Office of Education, "An attempt was made at Vassar two years ago to determine why students study. The most important factors were interest in the subject and the realization of the value of the work for the future."<sup>1</sup> Accepting this, we might surmise that why persons do not study, why they do all sorts of things besides and in place of study, is lack of interest in the subject and absence of realization of the value of the work for the future.

#### *What Constitutes an Education?*

Motivation from actual interest in subjects and from perception of their bearing upon future needs would appear to fuller extent if the college lent itself less to the aim of securing credits. In both high school and college the seeking of credits often reduces the educational process to folly; to hold credits in subject matter and to be essentially educated are not synonymous.

In programs of study leading to professions and specific callings, the period of attendance supposedly reflects the actual necessities of preparation, which often requires four years. The nonprofessional baccalaureate degree appears to rest on the assumption that registrants not contemplating professions or specific employments should have four years of college anyhow, a questionable assumption to-day. Why go to college four years? If interest in subject matter arising from perception of its future use were

the determiner of the period of attendance there would be many different periods of attendance.

If the nonprofessional baccalaureate degree is retained, additional credentials seem to be called for in recognition of work and part-time attendance. Probably we are not yet ready for the idea of going to college only for qualitative objectives and then going home; supplementary credentials of the nature of achievement certificates might well be introduced, these to describe in suitable detail the student's performance. The bearer of an achievement certificate, then, without stigma of having begun but of not having finished a four-year course, would have documentary evidence that with him the pursuit of knowledge in the given institution had been as extended and as well adapted to his future use as was possible.

#### *Eliminating Aimlessness*

As to the period of attendance, higher education should be thought of in quite a different way from secondary and elementary schooling. At the threshold of college the registrant should be expected to have a pretty definite occupational purpose or to entertain specific preferences for types of instruction. If the conception of higher education as an opportunity for preparation differing in character and extent according to individual need and purpose were promoted, aimlessness, perfunctory performance and bored acquiescence in routine, with compensatory campus excitements, would tend to be replaced by the spirit and manner of seekers after vital things. The tradition of four years of college attendance is at odds with the actual needs of a great number of young people; it holds some in college too long; it conflicts with a rational determination of the period of most profitable sojourn; it discourages from attending college the young person who wants less than four years; it coddles the student who evades occupational decision; it makes thoughtless persons expect magical properties of a college degree; it deflects attention, regard and effort from the proper evaluation of courses and curricula.

A four-year period is doubtless a well calculated period for preparing for certain employments and professions, although even this assumption might well bear investigation. But for many occupations, activities and purposes, four years of higher education may be too short or too long. For a great number the period is too long. The doctor who would prescribe a four-mile walk for every patient who needed exercise would find a kindred spirit in the educator who cannot picture a reputable college course of less than four years.

<sup>1</sup>Higher Education, Biennial Survey, 1926-1928.



The success of the junior college creates a presumption that the quantitative requirements of the traditional college course should by no means stand uncontested, and deficient and inept motivation of college registrants, in too many cases, constitutes an argument for a more flexible type of curricular organization and better recognition of individual needs.

With higher education administering to individuals and groups regardless of the four-year tradition, the need of ascertaining the most vital subject matter would be imperative. The attitude of the student under the new conditions would compel attention to the merits of subject matter. Fewer textbooks would appear written for semesters rather than for students. Courses of study would undergo more continuous revision. The relating of instruction more closely to the future needs of the student would have an invigorating effect upon matter and methods; it would send the colleges out to learn the needs of men and women in cultural, civic and occupational relations and activities. Thus informed, the institutions would be in a better position to give aid in convincing form. Methods of instruction would be improved. The person who along with study attempts to write a drama gains a knowledge and appreciation of the drama that study alone would not impart.

Problems of motivation are absent when the individual is engaged upon something he sees is important to him, although there are such problems when he is idle or is pointlessly occupied or working at cross purposes or being led where he does not care to go. With the student of college age the discerned value of a study affects deeply his attitude as a learner.

The college certificate, to consist of a statement of the student's specific purposes, his advisory contacts, courses taken and activities engaged in, with ratings or credits, period of attendance and proficiencies with reference to

occupations or functions, is not suggested with the idea of reducing attendance, but for the spirit of attendance and for the replacement of certain elements. With the weakening of the four-year attendance tradition and the vitalizing of instruction to meet specific demands, there might even ensue a marked increase in number of students. Many young persons to-day hesitate to attend college because of the presence of conditions extraneous to serious aims. The achievement certificate with its recognition of specific objectives would tend to put on the defensive those who go to college disproportionately for the sports, social life and leisure.

Emphasis upon a quantitative graduation, except in cases where professional requirements incidentally dictate such, is an ally of deficient and

frivolous motivation. The primary purpose of going to college is to secure the best possible preparation for occupations and for living well as an individual and in relation to the necessary organization of society.

The remedy is through a greater individualizing of the program, the earlier coming to grips with requirements of employment and living, the extension of the junior college idea, the introduction of a type of credential differing constructively from the usual college diploma and the incidental discouragement of attendance of registrants whose purpose is not manifestly that of specific achievement and preparation.



*This shaded walk leads to the administration building of a Western college.*

# Critical Situations That Confront Rural Education

By EDMUND DES. BRUNNER, PH.D., ASSOCIATE IN RURAL SOCIOLOGY, TEACHERS COLLEGE, COLUMBIA UNIVERSITY

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THE rural heritage in America is precious; all the more so because of the contributions that rural America has made to the nation and to the world. It is a heritage so precious that it is worthy of the most jealous guardianship, and few groups are more concerned with its protection than the rural educators of the United States.

It would be a congenial task if I could join my voice with those other rural educators who extol the value of our custodianship. It is not natural for me to assume the rôle of one who "views with alarm" the various elements in the changing rural scene. Too frequently such alarm is traceable to a dislike of change rather than to a genuine concern for the future based on an intimate knowledge of the many implications the various changes suggest for the heritage we enjoy and for the guardianship to which we have been called by the circumstances of our lives.

But our conviction of the high importance of our task, our certainty of the superlative value of the best in rural life, must not blind us to the implications for our profession of the changes that have taken place. We are surfeited with change. One invention follows another, it sometimes seems, as rapidly as automobiles upon the Lincoln Highway. In this process of change new situations constantly arise, new adjustments are constantly called for, and if these are not made with sufficient rapidity social tensions occur which, unrelieved, cause critical situations. For the sake of the rural heritage we cherish and would gladly pass on, the present situation should be examined to discover where, if at all, our ideals are challenged by the tendencies of modern life.

Let us think back ten years. The World War was just over. The American farmer was never more prosperous, and looked forward to the best year of modern times. A high idealism gripped

the nation and seemed to be manifesting itself in many ways. The country church had at least officially espoused the social gospel. The social agencies had discovered rural America and appeared to be moving to meet its social deficits. The rural school was in the heyday of the consolidation movement and, supported by the surplus wealth of rural America, was expanding and improving its program on every side. This was in 1920.

## *What the Decade Has Brought*

And to-day? Ten years have seen an unparalleled agricultural depression, one of the greatest migrations of history in the rural exodus, a sharpening of the urban-rural conflict, a weakening of home, church and school and a great forward surge in the process of urbanization. Some of these changes have produced critical situations for the rural educator, a few of which we shall now examine.

Most familiar of all, of course, is the agricultural depression. Approximately \$23,000,000,000 has been lopped off the capital value of American farms since 1920. Most of this came in the first half of the decade but the downward trend in the price of farm land has continued steadily although slowly ever since then. This represents a loss of about 35 to 40 per cent in the capital assets of rural America in the ten-year period. This is a complete reversal of the trend for the forty years before that time which averaged an increase of 80 per cent a decade in the value of farm property. No region has entirely escaped from the effects of this deflation, although some have suffered far more than others.

Income has also shrunk. How could it be otherwise? Wheat dropped from \$3.25 a bushel to less than a dollar. Other cereals had proportionate declines. Many specialized crops followed suit. Raisins, for instance, dropped 90 per

cent and wool 70 per cent. The purchasing power of the average farmer was in 1921 and 1922 only about half of what it had been in 1918 and 1919, and even now it is only 80 per cent of what it was. Yet, the return in the peak year was less than 7 per cent on the capital value. There have been years in this last decade when the statistical average farmer barely broke even which, of course, means that millions were lost. Even now the return on the shrunken capital is barely 4.5 per cent for the nation as a whole. Farmers who before the war received 20 per cent of the national income have had only 10 per cent in the present decade—half as much.

The period from 1880 to 1920 had good years and bad. The country passed through several depressions, especially that of the early nineties which Herbert Quick has portrayed so vividly in "The Invisible Woman." But by and large through this period the farmer could count on an annual dividend of 8 per cent through rising land values. It was this dividend that financed the great improvement in local roads, in rural school buildings and other social improvements that especially marked the years following the report of the Roosevelt Commission on Country Life.

Furthermore, for the loans made for these improvements in 1917, 1918, 1919 or 1920, dollars, which in terms of purchasing power were worth only one-half the 1913 dollar, must now be repaid through taxes in dollars that are worth from three-fourths to four-fifths of the 1913 dollar. This fact has increased the actual burden by half again over the original amount and what is true of loans for better schools is true also of billions of dollars worth of farm mortgages, which have increased greatly in the last twenty years and especially in the last ten. Only about three-tenths of our farm owners are debt free, and the American farmer as a whole owes his creditors twelve billion dollars, three times as much as he owed in 1910. His equity in his land has never been lower. Here is one of the big elements in the agricultural situation to-day.

#### *Paying for Social Progress*

There are many implications of great social importance in this situation.

In the first place, profits in agriculture must come for many years ahead, perhaps always, from efficiency in production plus skill in marketing. The marginal farmer who financed himself with profit on rising land values is doomed. In the future, profits in agriculture will come as profits come in industry.

This means that social progress must be paid

for out of earned, not unearned surplus. This fact puts a new aspect to the question of financing school budgets and especially school buildings. Too few American rural leaders realize that this change in the profit basis of agriculture has come to pass and hence it is the more important that school administrators make no mistakes in their plans for the future. Never has there been a time when the question of what a given community could afford was more important than now. And what it can afford must be assessed in terms of *all* social needs not merely the needs of education. The last decade has seen many instances in which the erection of the sort of a school plant desired by the educational authorities has absorbed all the surplus of the community and hence has prevented progress in meeting other social deficits.

#### *The Nation's Responsibility*

My concern is with critical situations and our reactions to them, not with remedies, but may I say in passing, that eventually, if democracy means anything at all, it means that the strengthening of rural education must become the concern and responsibility of the entire nation and hence of the Federal Government.

The agricultural depression has been accompanied by several other phenomena which have in turn produced critical situations. There has been a great exodus of country people to the cities and a growing antagonism to the cities on the part of those who remained in rural America.

The exodus has been tremendous. The decade just ended saw 15,000,000 people, nearly one-half of our farm population in 1920, leave their lands and turn cityward. It was a movement greater even than the European emigration from 1904 to 1914 and surpassed in modern times only by the surge of millions of Chinese into Manchuria. The great expansion in the automobile industry, the birth of the radio industry and the increased demand caused thereby for steel, rubber and other products enabled the city to absorb these rural people for some years.

Recently, however, the increased efficiency of industry, amounting almost to a new industrial revolution, coupled with a recession in business activity and overproduction in several major lines, has created a great army of urban unemployed and greatly lessened the rural immigrant's chance of securing a good job in the city. This fact has registered in the sharp decline in the number leaving the farms during the last year or two and in the greater number leaving the city for the country.

This increased efficiency, let us note in passing,



is not merely a phenomenon of urban industry. The modern farm has become mechanized. There has never been a time in the United States when so few people could raise so much food. Never have we had so many persons dependent upon each acre of land in crops, and yet we export food. This increased per capita production has been as powerful a spur to the emigration of rural people to the city as the economic depression and the other more familiar causes which have always been responsible for the urbanward movement.

Fifteen million is a lot of people. The exodus has closed many churches and schools and weakened others, especially in the areas of one-crop farming. But the net loss has not been so large by any manner of means. There has been a counter stream of about 9,000,000 going from city to country. Who are these people? A few are immigrants who, as a class, make good on the land. Most of them, however, are of three groups: first, those who, having tried both, prefer rural life to urban. Some of these bring with them capital they have accumulated in the city. Second, those who were once part of the farm's surplus population but are now called back to it, often to take over the management of the old farm. Such persons have been subjected to the influence of city life, and often become leaders in the communities to which they go. The third group includes those who seem born to failure. They answered the siren call of the city hoping to better themselves; but they have failed to find satisfaction and now drift back.

#### *Small Farmers Are the Sufferers*

I am not one of those who decry this rural exodus. For one reason or another America has been producing more food since the World War than it could profitably market. Much of this surplus has been raised by the marginal farmer, marginal either because he occupies land that had better be used for grazing or forest rather than for crops, or because he is inefficient. Such are some of the farmers in the Southern Highlands, some of the croppers of the South, some of the grain growers of the dry farming areas. But, why enumerate more? If a considerable portion of the marginal farmers could be usefully employed in other ways, changed from producers to consumers of food, there would be small need for a Federal Land Board.

It is this process that was in part going on during the last decade and which rationalization in industry and depression in business have checked. Unfortunately, however, some left the farm who should have stayed, driven off by the

depression. The United States Department of Agriculture estimates that at least one-quarter of those now on the land are marginal farmers. If one studies the losses in rural population on a county by county basis, it becomes apparent that they have occurred chiefly in the areas of poorer soil and in areas from which Negroes and poor white tenants have been drawn to supply cheap labor for the urban industries, mines and cotton mills of the South. These are not conditions that affect the Middle West where the soil is good and where agricultural population in its ebb and flow to and from the city has become stabilized to a considerable extent.

#### *Complications of the Rural Exodus*

The rural exodus, which I believe is nearly over in terms of totals, at least for the present, raises critical situations, however, from other points of view.

The larger farm due to a mechanized agriculture, the larger trade area due to the automobile and the hard surfaced road, are making it increasingly difficult to forecast school enrollments in the future, especially in the small districts. Other things being equal, economy in building may be better achieved over a period of years through consolidation.

A more important implication in the shift of population is the loss of leadership that rural America has suffered. We are used to supplying the city with its leaders. That is a familiar tale even though it is now questioned whether the country has given as many leaders as her former share in the population would lead us to expect. But the studies of one rural sociologist in these last years seem to show that it is the best and the poorest who leave the country for the city. In the past it was assumed that the country would retain a sufficient share of leadership for its own needs. Whatever the facts in the past it cannot be assumed that the production of rural leadership will take care of itself in the future. Rural education has suffered in the past from too much assumption and conjecture. We have placed vocational training in agriculture in our curricula. We must now show the need and possibilities of rural leadership in all our teaching.

But of most immediate importance is the fact that the rural population has become a minority element in the total national population. In 1920 for the first time urban population slightly surpassed the rural. The current year, 1930, will see a greater difference though probably rural America will still have more than one-half the children. But from 1920 to 1930 the farm population has dropped from 30 to 20 per cent of the

national total. Even in many of the states the urban population has passed or is drawing abreast of the rural. For 120 years of national life rural America, if united on anything, could achieve its ends by the power of its majority. This is still true in many states as the North Dakota and Minnesota farmers have shown several times in the last fifteen years. But that time is over. Even in states where the decline of rural population has not been greatly felt or has been checked, the cities are growing and in many states will ultimately dominate as now in the agricultural state of Illinois.

Rural America therefore must use the methods of minority groups to achieve the ends it deems desirable. Quite apart from political methods there are fundamentally sound developments that may be realized. The importance of rural America must be stressed in every possible way. The city must realize that farmers are buying \$7,000,000,000 worth of manufactured goods a year from urban industry, that they are furnishing not only food but also an unceasing stream of young people to replenish the urban population; that, in short, it is to the city's advantage to give to rural America that which will further its best development.

This has become increasingly important in recent years because of the growing conflict between rural and urban interests. It is possible that this controversy may take its place with that between the North and South, and that between capital and labor, as one of the three great decisive issues that have disturbed the development of the United States. The Farm Bloc originally represented a clear-cut break between the West and East, with the South as little more than spectator.

#### *Class and Section Again in the Lead*

The battle has centered around the so-called McNary-Haugen Bill. That bill has had rather wide support on the part of the Western farm press. It has been attacked by almost every urban paper of consequence and by the house organs of some of the big financial institutions. The vote on the bill in 1924 and 1926 was most significant. With hardly an exception there was not a vote against it west of the Mississippi River except on the part of congressmen representing the districts in which were Denver, Los Angeles, San Francisco, Portland, Seattle and Spokane. In the eastern part of the Corn Belt and the western portion of the Middle Atlantic States, practically every rural congressman voted for the bill, every urban one against it. So far as I know not since the days of the slavery issue

has there been as clear-cut a division in the House, based on section and class, as opposed to party difference.

We have seen the same thing in these last months in the vote on the tariff bill that has been before Congress since last April. Senators from the agrarian states without regard to party have been voting as a unit against the old guard Republicans, who are almost exclusively from the strongly urban states.

#### *Dangers of Urbanization*

A minor cause in this rural-urban irritation, but one of major importance from the point of view of rural school specialists is the inequality of funds for social service and educational purposes as between city and country. I have alluded earlier to this problem in another connection but the situation is so critical that it deserves emphasis. The inequality between city and country in appropriations for social good is manifest both in government and in private philanthropy. An illustration will help to clarify the point. In one resort community the per pupil grant from the state to its school is about \$200 a year. In an industrial community in an adjoining county the state appropriation averages \$100 a year for each pupil. In the rural community in which I lived the state's contribution was less than \$20. These differences were due to differences in ratables. The state monies were distributed on the basis of wealth, not children.

Similarly, there is the problem of extending the newer and more specialized educational services to rural boys and girls, for instance the problem of vocational guidance. Some time ago the Institute of Social and Religious Research asked 5,000 rural high school boys and girls about their life work. The replies showed no knowledge of the opportunities of the present day. Teaching, nursing and stenography were mentioned almost exclusively by the girls nor was the boys' choice very much more varied.

Per capita health expenditures in cities are measured by dollars; in the country by cents and yet in these days of close interrelations rural health is a matter of vital concern to the city. One-tenth of our counties have health units. Four-fifths should have them.

Chairman Legge of the Federal Farm Board has stated that since 1921 American philanthropy has given away \$17,000,000,000 of which \$1,000,000 only has gone directly to the farmers. I question his figures somewhat. The contributions of the Rosenwald and other funds to Negro rural communities must alone nearly equal if not exceed this sum; but the main point is correct.



Rural America has not shared to any extent in the distributions of American philanthropy.

The city's romantic creation of the machine with its myriad contrasts of assets and liabilities has captured philanthropy's imagination. So has the unusual—archeology, anthropology in the South Seas, the cradle of man in the Gobi Desert or the Nile River Valley, the South Pole, the ocean bottom—all worthy, interesting items for research. But why does not someone grapple with the problems of the farmer?

Finally, I believe that the process of urbanization is creating a series of situations that have in them elements of danger to our rural heritage. I believe we shall the sooner overcome these influences if we recognize them. On the other hand, the urbanization of rural life to a degree is inevitable and probably desirable. None of us would welcome the survival of the intense individualism of the farmer that made cooperation so difficult of attainment in economic or social projects, nor the isolation that drove some women mad. We would not continue the one-room ungraded school if we could. World conditions affect the price of wheat and the farmer's vision must scan the world.

The mechanization of agriculture and of the house work of the rural home is part of the process of urbanization. Neither can nor should it be checked. The radio links the farmer and villager, however distant, with the best music of the world, popularizes subjects of national and world concern and makes the voice of the nation's chief executive as familiar to the countryman as that of his grocer. But it also carries something of the spirit of the jazz age, the glorification of speed and superficiality of the city.

#### *Intensifying Youth's Restlessness*

The moving pictures do even more, relatively poor as most rural moving picture shows are. Indeed, it is their mediocrity that is their chief harm. It is a distorted view of life that the average feature shows, and the high school boy and girl have not the experience and maturity to evaluate what they see. It is not only the Asiatic and the European who gain a distorted view of American urban life from the moving pictures. So, too, the urban press is circulating more and more in the countryside but it has not yet taken its rural constituents much into account and its influence is not always wholly good. But all these things have intensified the restlessness of rural youth and too many of them, well over two-thirds of those interviewed by the Institute of Social and Religious Research are planning to leave their home communities.

Influences such as these have undermined the influence of those basic social agencies, the home and school. Old traditions and mores have been discarded and I, for one, am glad to see many of them go. There is no need to elaborate these familiar facts. But a period of transition such as this is always critical. If the pendulum swings too far it takes humanity or the social group concerned a long, weary period to work back to what experience proves to be of abiding value. To face the new age but to conserve the best of the old, to follow truth wherever it leads and apply it, to be open-mindedly critical of our methods but alert to our dangers and courageously loyal to our fundamental purposes—this is the high adventure of the rural educator to-day.

#### *Into the Promised Land*

This means more than we have thus far done. We must go beyond our studies of pupil intelligence and achievement of costs and budgets. We have studied the school as an institution exhaustively. We have never studied the school in relation to its social and economic environment. In these times of change the rural educator cannot afford to neglect such a study nor to avail himself of the material on rural life that is accumulating. As never before the rural educator needs rural sociology.

We face the sort of responsibility that has never come before in the history of the world. The age old experience of the race has been rural. Rural heritages condition the instinctive reactions of the people of every land. Within a moment of history, Science and its child, the machine, have decreed that for centuries to come the race will have a new earth on which to live, one in which what happens in the Antipodes may be of more concern to the American farmer than what happened in the next county was in the days of our grandfathers; one in which the old handicaps of isolation are banished forever from country life; one in which city and country shall be no more but all shall be one in an interdependent, mutually-serving civilization.

To-day this new heaven seems to be of and in the city. Soon the interdependence of city and country will be recognized. Whether that soon will be to-morrow or the next day or the day after, will be determined by the insight of rural leaders into the processes that are going on, and the skill with which we avoid the critical dangers and make use of the abiding values of our rural heritage and of the resources of new technologies for the guidance of our nation into the promised land of a better and richer civilization for both country and city, for America and for the world.



## Recent Tendencies in School Equipment Design\*

*Makers of school furniture have ceased to adhere blindly to tradition and are giving teachers and pupils more and better tools for progress in the instructional program*

BY JOHN A. SEXSON, SUPERINTENDENT OF SCHOOLS, PASADENA, CALIF.

**I**MPRESSIVE changes have taken place in educational practice in this country during the last half century.

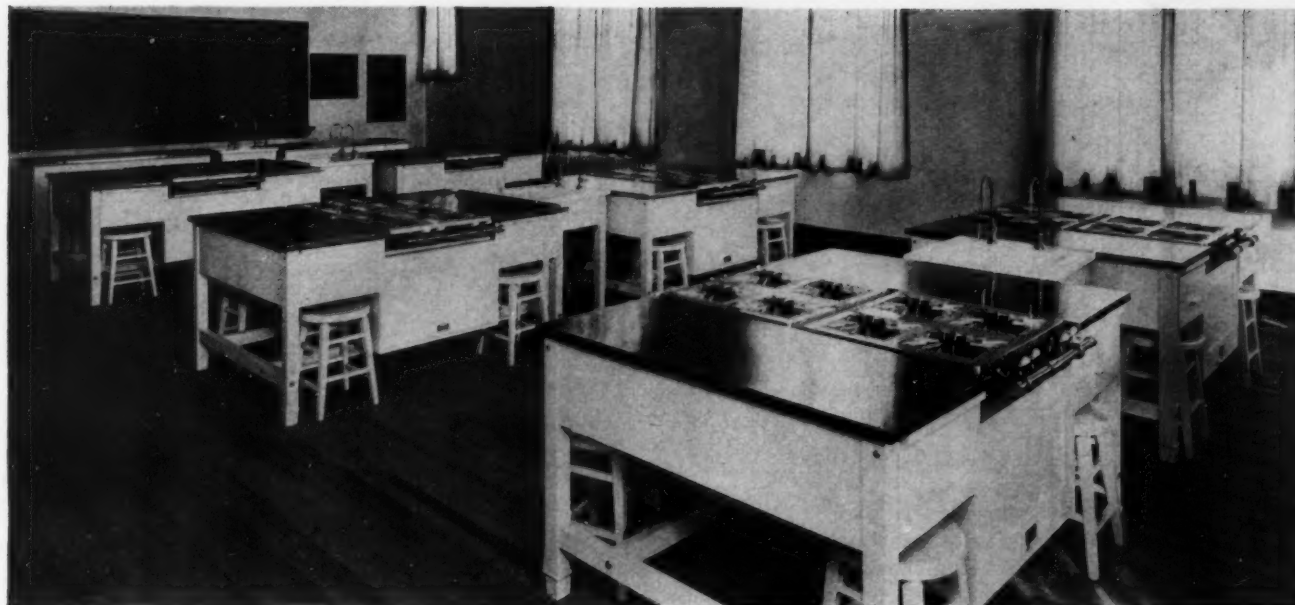
While these changes have been in progress, the National Education Association convention programs have devoted a great deal of time to discussions of problems having to do with finance, curricula, organization, management and method.

\*Presented at the meeting of the Department of Superintendence of the National Education Association, Atlantic City.

At the same time these discussions have been going on in the convention halls, all of us have been interested in and amazed at the developments that have been made in educational furniture and equipment which have been brought to our attention by the annual displays of school goods in the exhibition halls. In fact, it is almost a standing witticism that the visitors and teachers attending the conventions frequent the programs, but that the superintendents, like small



*The cafeteria, Horace Mann School, Beverly Hills, Calif., is fitted with practical and attractive flooring.*



*The domestic science room of the Muldoon School for Girls, Rockford, Ill., is splendidly equipped for teaching cooking.*

boys at a circus, spend their time examining with increasing and ill-concealed wonder the displays of school furniture and equipment.

But—do superintendents modify their practice after they return to their school systems in terms of what they hear at the programs or in terms of what they see at the exhibits? Perhaps some prospective Ph.D. will undertake to answer the question. Surely it will not be amiss if we make proper acknowledgment to designers, manufacturers and distributors of school furniture and equipment for the great contribution they have made to the present educational program.

Pupils and teachers have more and better tools for progress in the instructional program to-day than they have ever had. The rank and file of both teachers and pupils accept these tools as a matter of course. Few see back of them the expensive and tedious processes by which they have been produced. Dr. John Dewey focused attention on the problem of school equipment when he walked out of the old schoolroom with its fixed, unsightly, unhygienic and ill-adapted furniture, and went shopping for usable and useful equipment. Report has it that he went outside the shops maintained by those who had heretofore controlled the design, manufacture and distribution of school furniture, and sought to meet the needs of his teachers and pupils by purchasing wherever he could find it the equipment that would best serve their purposes. This created consternation and confusion both within the schools and within the ranks of those who had formerly ministered to their equipment needs.

One will note with much interest as he scans the history of the educational development of our

country, the outcomes expected of the child's school experience in terms of an ever shifting philosophy of education. It is apparent that the schools have become continuously more child-centered, with the stress of emphasis placed on the child's attitudes and habits rather than on subject matter or factual information.

With the new objectives for the school—health, self-expression, wise use of leisure time, vocational fitness and world-mindedness—have come modified procedures. We have witnessed the introduction of the laboratory method in a more thoroughgoing manner at all levels of education. The extended use of the library has been obvious. The problem project method has played a large and an important part in the new curriculum of the schools. The shift has been from standardization of child experiences toward a particular concern about the welfare and growth of each individual child. The shift in the form of social control toward the ever increasing guided freedom of the child has brought into being a school set up as a miniature democracy wherein the child may practice this virtue of government. In these last years there has been a deep and intelligent concern about health in all of its relationships to the child. Now much concern is given to the value of play, relaxation, cleanliness and the formation of the habits essential to the child's physical well-being. This is in itself a striking contrast to the factual information acquired by pupils of a former generation concerning the number of bones in the body, with little stress laid on the use of the toothbrush or on other health measures.

Under the fine influence of Dewey, all of us have

witnessed the school try to provide for the child the richest possible experience through affording him an opportunity to adjust himself intelligently to his environment. The world round about has been brought in; the windows of the school have been opened outward. In a well organized activity school of to-day, the administrator of many years will note with some amazement the silence of the teacher in contrast to the ever talking, lecturing instructor of his day, and the stimulation of the initiative on the part of the child. As a result of this changing philosophy of education, there has come a challenge demanding that new situations and conditions be met with intelligence and that careful study of the needs of schools replace a dull adherence to mere custom in equipment and equipment design. The evolution of new school equipment is the answer to the challenge.

#### *Utility Is Considered*

This discussion will deal with the design, manufacture and distribution of different types of school equipment, but it will also call attention to some of the larger aspects of the problem. First of all, interest has been awakened in buildings and rooms wherein much attention has been given to utility. The piling up of boxlike rooms, alike in size and design, and masking them behind pretentious architectural treatment has slowly given way to a carefully planned layout designed specifically to house certain services clearly anticipated by the designers. These plans call for equipment designed to serve these same services so that gradually each school or job has received intelligent study.

Studies of this kind give assurance that school-house design and school equipment design will be harmonized in such matters as the following: If concrete floors and linoleum coverings are provided in the building design, the furniture to

accompany such a setup will necessarily be of the movable type since it is impossible to fix furniture to such floors. On the other hand, if fixed furniture of the immovable type is to be used, then floors suitable to receive and accommodate this type of furniture must be part of the building design.

#### *When New Equipment Is Needed*

Many school systems have been confronted with the most serious equipment problems due to the fact that superintendents of schools and boards of education have been unwilling to set up in their budgets proper amounts for the replacement of equipment, with the result that they have been unable to discard obsolete types of furniture and equipment. This situation has compelled many superintendents to move into new buildings, designed in the light of the modern educational program and inspired by a modern philosophy of education, and to install therein furniture and equipment left over from old buildings of an entirely different type and design, suited to a different type and kind of educational program and made to serve an educational system supported by a wholly different type of educational philosophy.

A single example of a modern program of furniture and equipment as it has been worked out by a city school system is presented here to show that the same type of principle and the same type of technique may be used in the solution of the equipment problem as in any other field of educational endeavor. One city system reported its policy with reference to school equipment as follows:

1. All furniture purchased for use in the school system shall be of the movable type.
2. All pupils' desks shall be of steel construction.
3. In all primary rooms, grades one to three,



*The type of windows shown here ensure both good light and good ventilation for the pupils.*





*The Robert Oakman School, Fordson, Mich., employs a type of movable seat that is attached to a movable desk.*

steel tables with wooden tops, and steel chairs with wooden seats and backs shall constitute standard equipment.

4. All tables shall be of such design as will permit the use of each table by two pupils.

5. All special rooms, such as those provided for home economics, commercial work and for science laboratories, shall as far as possible be fitted with furniture designed for multiple use so that rooms of this type shall be available for as wide a variety of uses as possible.

6. All buildings shall be designed with a minimum of storerooms, closets, and built-in features. It shall be the policy to provide for this type of service by means of standard cabinets, cupboards, wardrobes and bookcases, all of a movable type, to be utilized in any room of the school as desired and easily moved from place to place in the building or from building to building as the needs of the school or the program may warrant.

7. No pupils' wardrobes or closets are to be included in any new building, such needs to be met in the future by corridor lockers in both the elementary and secondary school buildings.

#### *Changes of the Last Few Years*

This illustrates concisely the policy covering the underlying fundamentals with respect to furniture and equipment, and also illustrates a studied procedure in contrast to the blind adherence to tradition or custom.

Leaving this more general field of building and equipment design, we shall discuss briefly certain specific changes and developments indicating gen-

eral trends occurring within particular fields.

Recent developments in school equipment from the standpoint of health: The major portion of money expended for school furniture and equipment has always been for seats and desks. Even to-day with the great changes that have characterized our educational philosophy and our educational procedure, major appropriations are in the field of seating. One may give a single illustration from the field. Dr. Henry E. Bennett has made extensive and detailed research studies on the subject of seating. In the preface of his book entitled "School Posture and Seating" (Ginn & Company, 1928), Doctor Bennett says:

"Fixed habits of sitting are inevitable. They are bred in the bone and in the muscles. They affect the condition and functioning of the vital organs and in large measure determine one's vigor, energy, resistance to disease. Upon these things depend efficiency, happiness, attitudes toward life. Sitting habits affect all of life's values. They are controllable through knowledge, ideals and material aids. Upsitting should express more of alertness, self-reliance, energy, poise and power than does upstanding, since sitting enters more into life than does standing.

"The habitual sitting posture of most people is distinctly bad. A chair conducive to good posture is a rarity. Much of the seating in public buildings and conveyances makes wholesome sitting impossible. School seats, even those designated as hygienic or posture seats, often violate the fundamentals of posture hygiene. There is a medical literature of scoliosis, a physical training

program for standing and movement, a library of school hygiene; but on the simple matter of wholesome sitting habits there is no adequate literature or organized knowledge.

"Such are the reasons for this contribution to a science of sitting and seating. It is made as practical as possible because the need is rather for doing something than for saying something about it. It is focused upon the problems of the school because going to school is among the most sedentary of occupations, because in school permanent habits of sitting are formed, because 'what you would have in the life of a people you must first put into the schools,' and because educators are the most responsive and responsible group to whom to appeal."

He further points out the fact that this study of the problem of design and construction of school seats was carried on at the University of Chicago and with the cooperation of such school systems as Des Moines, Cleveland and Philadelphia. Here we find the best type of research procedure devoted solely to the problem of discovering the principles that should lie back of the design of school seats. Apparently this study was not controlled by any thought of profit or with the idea of commercial factors involved therein; at least the procedures were not modified at any point by considerations that might be attributed to any other motive or desire than that of discovering the best possible solution of the problem.

The study of Doctor Bennett's book reveals chapters devoted to the following subjects: The Significance and Science of Sitting, Skeletal Mechanics of Sitting, Muscular Factors in Sitting Erect, Posture in Relation to Visceral Support, School Postures and Spinal Defects, Posture and Visual Hygiene. After laying this foundation for scientific investigation, Doctor Bennett tells of the equipment and methods used and the conclusions arrived at with reference to such factors as seating height, the assortment of seat sizes for the several grades, the depth, slope and form of the seat, the determination of the seat back, the desk height, the slope and spacing, adjustable furniture, movable seats, materials and construction and the buying of school desks.

#### *Choosing the Right Kind of Desk*

During the course of Doctor Bennett's studies and conclusions there is not found any evidence of propaganda for or against one or another type of school desk or seating equipment. There is found, however, a continuous effort to reveal pertinent facts and substantial conclusions as to the factors that should control the selection of school furniture and equipment and the selection of

school seats and seating equipment to be used.

One dominant theme runs throughout his book, which he has phrased as follows in the opening of one chapter: "The type of seat to be selected for a given grade or room should be determined on the basis of the dominant type of work for which it is intended. There is no one desk type."

When he deals with the question of adjustable *versus* fixed or rigid types of seating, Doctor Bennett wisely concludes that the purchase of adjustable furniture will not solve the problem involved until the teachers or the authorities in charge of the various classrooms actually adjust the seats to individual needs. There is a decided inference in his conclusions to the effect that this might not be as simple and as easy a task as many of us are led to suppose. He further points out that it has been characteristic of school surveys to confine their reports to the number of adjustable seats utilized within a school system. Apparently he has found no evidence that any surveyor has taken the pains to find out what percentage of the adjustable seats have been adjusted.

#### *Movable and Fixed Seats*

Again, when Doctor Bennett discusses movable seats in comparison to furniture that is screwed to the floor, he calls our attention to the fact that the screwing of seats to the floor is not a time honored and universal custom, nor are movable seats a modern American device. He points out that the early furniture was sometimes built to the floors but that deliberately screwing it down to keep it in alignment was a part of the excessive rigidity which developed in American schools during the past century, and that European writers are accustomed to refer to the fixed or screwed down seat as the American custom.

His whole discussion of the movable seating problem hinges on such factors as sanitation and floor preservation, building and equipment economies, the flexible seat and the social spirit and atmosphere and liberty of movement. He points out in this connection defects inherent in movable seating such as bad lighting, a likely incident to freedom in the matter of placing and facing seats, panic danger, obstruction to the regular passing of pupils to and from the room and the cluttering of passageways. He calls attention to the fact that in some cities fire and panic regulations prohibit the use of movable seats in all public places of assembly, including the schools. He also discusses and brings out structural defects and structural difficulties, and in a nine-item summary presents impartially the arguments for and against this type of school seating.

*(To be continued)*

# Analyzing Duties of Superintendents of Small Schools

*This study attempts to determine the most important tasks of the heads of small school systems; the tasks requiring the most time, and how clerical duties and office equipment affect the superintendent's efficiency*

BY FRED C. AYER, PROFESSOR OF EDUCATIONAL ADMINISTRATION, UNIVERSITY OF TEXAS, AND  
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THERE are about five times as many superintendents of public schools in the United States in cities of fewer than 5,000 population than in cities of greater population.

As these superintendents serve more than half the population of the entire country, it is important to consider the administrative duties that characterize their work.

In this article an attempt will be made to determine: (1) the chief administrative duties commonly performed by superintendents in small

cities; (2) the administrative duties requiring the most of the superintendents' time; (3) the influence of the size of the school on the number and kind of administrative duties performed, and (4) the influence of clerical duties and office equipment. The source of the information used in this article is a detailed study of 47 selected administrative duties as performed by 129, or approximately 50 per cent, of all of the superintendents of small school systems that have enrollments between 160 and 1,600 in the state of Texas.

TABLE I—ADMINISTRATIVE DUTIES OF 129 SUPERINTENDENTS OF SMALL SCHOOLS LISTED ACCORDING TO POPULARITY

Duty	Per Cent	Duty	Per Cent
Meet with the school board regularly . . .	98	Make out daily schedule for high school . .	73
Prepare annual reports to state departments . . . . .	96	Make plans for building program . . . . .	72
Assign duties, supervise janitors . . . . .	95	Keep inventory of property up-to-date . .	72
Organize the departments of the school . .	94	Prepare financial reports . . . . .	71
Study and influence policies of the board .	93	Arrange salary schedule for teachers . . .	71
Assign duties to teachers . . . . .	93	Select and subscribe for magazines to be paid for by school, if so furnished . . .	70
Order school supplies . . . . .	93	Schedule work of pupils in high school . .	70
Prepare rules and regulations . . . . .	91	Employ and dismiss janitors . . . . .	70
Inspect toilets, service departments . . . .	88	Conduct local school experiments . . . .	69
Select textbooks and library books . . . .	88	Make out pay rolls and deliver pay checks .	68
Prepare news articles, school publicity . .	87	Arrange a diagnostic testing program . . .	62
Collect tuition, deposit and keep records .	87	Keep records of pupils' school work . . . .	61
Check, study and improve attendance . . .	87	Plan and direct assembly programs . . . .	58
Investigate and help discipline pupils . . .	87	Take and check school census . . . . .	58
Direct upkeep and repair of property . . .	86	Plan bond issue, secure bids . . . . .	50
Arrange opening and closing programs . .	85	Select books for teachers' professional library, if school provides for it . . . . .	50
Establish athletic policy . . . . .	84	Organize system of accounting . . . . .	47
Prepare the school budget and execute it .	83	Attend educational meetings at expense of school board . . . . .	47
Plan beautification of school grounds . . .	82	Supervise decorations and arrangements of schoolrooms . . . . .	47
Employ and dismiss teachers . . . . .	81	Secure fire insurance for buildings . . . .	32
Make special promotions of pupils . . . . .	79	Direct and regulate transportation of pupils to and from school . . . . .	31
Organize extra-curricular activities . . . .	77	Edit school publication . . . . .	20
Classify new pupils . . . . .	77		
Organize discipline for halls, playgrounds, assemblies . . . . .	76		
Make community surveys, financial . . . .	74		



Forty-seven administrative duties performed by 129 superintendents of small cities are listed in Table I in the order of their popularity, together with the percentages of superintendents performing them.

Numerous discussions are possible on the basis of the array of data listed in this table. One of them pertains to the relations of superintendents and school boards. Research studies concerning this relation have shown that, in general, school

TABLE II—DUTIES LISTED BY 10 PER CENT OF THE SUPERINTENDENTS AS CONSUMING THE MOST TIME

Investigate and help discipline pupils (44)
Organize the departments of the school (30)
Collect tuition, deposit and keep records (30)
Check, study and improve attendance (30)
Organize extra-curricular activities (28)
Keep records of pupils' school work (28)
Study and influence policies of the board (23)
Assign duties to teachers (22)
Meet with the board regularly (19)
Prepare rules and regulations (19)
Prepare news articles, school publicity (18)
Order school supplies (18)
Organize discipline for halls, playgrounds and assemblies (14)
Prepare the school budget and execute it (13)
Assign duties to and supervise janitors (13)
Prepare annual reports to state departments (11)
Employ and dismiss teachers (11)
Plan and direct assembly programs (11)
Prepare financial reports (10)

boards have been reluctant to delegate certain types of authority to their superintendents. The present study indicates the same attitude on the part of many school boards in small cities. For example, only 80 per cent of the Texas superintendents included in this study have the authority to select and dismiss the teachers they supervise. Ayer<sup>1</sup> stated that 91 per cent of the superintendents included in his recent study select regular teachers. Ganders<sup>2</sup> stated that 89 per cent of the superintendents of small city schools included in his study in 1926 had this authority. Deffenbaugh<sup>3</sup> stated that 72 per cent of the superintendents of smaller schools had this authority in 1917 and 93 per cent in 1922. As a second example, only 69 per cent of the superintendents in the present study employ and dismiss janitors, yet 94 per cent have the authority to assign duties to and supervise janitors. Most authorities believe that the privilege of selecting employees

should be delegated to the superintendent if he is to be held responsible for the services rendered by them.

An examination of the list of duties and the number of superintendents performing them will show that the superintendent is attempting to perform many duties that could easily be delegated to principals. For example, 87 per cent of the superintendents report that they help discipline pupils; 77 per cent classify new pupils; 70 per cent schedule the work of high school pupils, and 61 per cent keep the records of pupils' school work.

#### *Superintendent Should Be Relieved of Details*

All of these functions are important. The superintendent is and ought to be responsible for them. However, it is not his task to perform minor details. The one thing he cannot delegate to others is his responsibility to the school authorities and to the public for the accomplishment of the purposes for which the public school exists. Hence, he must retain his own vision and judgment and set standards for those to whom the work may have been assigned. The superintendent must also see that the work delegated to others is actually performed, and performed economically with regard to time, materials and labor.

The 129 superintendents were requested to list the five administrative duties consuming the greatest amount of their time. Eighty-six of the superintendents responded to this request. Table II shows nineteen duties that were named by more than 10 per cent as consuming the greatest amount of their time. The duties are ranked in the order of frequency of mention with the percentages of the superintendents listing the duties as the most time consuming given in parentheses.

#### *Duties Consuming the Most Time*

All but four of the duties listed in Table II are performed by more than 75 per cent of the 129 superintendents. The following five duties are among the first ten consuming the most of the superintendents' time and are also among the first ten that are most frequently performed by the superintendents reporting: meet with the board regularly; organize the departments of the school; study and influence policies of the board; assign duties to teachers; prepare rules and regulations.

A study reported in the Seventh Year Book, Department of Elementary School Principals of the National Education Association, based on reports from 614 supervising principals gives the follow-

<sup>1</sup> Ayer, Fred C., *The Duties of Public School Administrators*, American School Board Journal, June, 1929, p. 58.

<sup>2</sup> Ganders, Harry S., *Personnel and Organization of Schools in the Small Cities*, Bulletin No. 6, 1926, U. S. Office of Education, p. 29.

<sup>3</sup> Deffenbaugh, W. S., *Administration of Schools in Smaller Cities*, Bulletin No. 2, 1922, U. S. Office of Education, pp. 33-34.

TABLE III—ADMINISTRATIVE DUTIES THAT ARE MARKEDLY INFLUENCED BY THE SIZE OF THE SCHOOL SYSTEM\*

Duty	Percentile Performance in Schools With Enrollments of			
	399 or Fewer 1	400 to 699 2	700 to 999 3	1,000 or More 4
1. Organize system of accounting .....	25	52	46	64
2. Prepare financial reports .....	57	73	69	88
3. Employ and dismiss teachers .....	67	77	90	92
4. Employ and dismiss janitors .....	46	71	82	80
5. Secure fire insurance for buildings .....	14	27	46	44
6. Plan building program .....	50	75	82	80
7. Plan bond issue, secure bids .....	28	50	69	56
8. Keep records of pupils' school work .....	78	67	46	48
9. Make out daily schedule for high school .....	82	83	65	52
10. Organize discipline for halls, playgrounds, assemblies .....	87	82	71	52
11. Arrange a diagnostic testing program .....	46	58	69	80
12. Arrange salary schedule for teachers .....	46	73	75	92
13. Direct and regulate transportation of pupils to and from school .....	7	33	42	40
14. Select books for teachers' professional library, if school provides for it .....	28	50	59	64
15. Attend educational meetings at the expense of the school board .....	38	44	42	68

\*Distributed according to enrollment in school. The figures indicate the percentage of superintendents performing each duty.

ing twelve as the greatest time consuming administrative duties<sup>1</sup>; conferences with parents; discipline; conferences with pupils; building maintenance; cooperation with health personnel; visitors; cooperation with the janitor; program making; registrations; banking and thrift activities; control of corridors and playgrounds; control of lunchroom.

#### *Clerical Work Is Time Consuming*

Among the eighteen administrative duties consuming the most time, as reported by Morrison,<sup>2</sup> are the following: discipline; conferences with teachers; conferences with parents; supervision of attendance; preparation of reports; supervision, building and janitor service; clerical duties; requisition and distribution of supplies; organizing the school's work; extra-curricular activities; making plans and programs for special school celebrations.

It is noticeable that discipline, reports, janitorial supervision, program making, organization and certain duties of a clerical nature seem to be common to all three of these studies. In all these lists appear many items such as reports, supplies, attendance, which could be performed by a well trained clerk. This would permit the superin-

tendent to devote more of his time to various executive duties that require genuine administrative ability.

The effect of the size of the school upon the number and type of administrative duties performed by the superintendents is noticeable. For purposes of comparison, the school systems were divided into four classes on the basis of enrollment. Schools with enrollments of 399 or fewer pupils were placed in Class 1; with 400 to 699 in Class 2; with 700 to 999 in Class 3; and with enrollments of 1,000 to 1,600 in Class 4. According to this classification, superintendents of the smallest and largest schools perform, on the average, from 2 to 11 per cent fewer administrative duties than do the superintendents in the two intervening groups or classes. The probable reason for the lower average performance on the part of the superintendents of the smallest and largest groups is that the superintendents of the smallest group, on the one hand, devote a larger share of their time to teaching, while the superintendents of Class 4 delegate more of their administrative duties to principals and office help than do the superintendents in the medium sized schools.

When administrative duties are considered separately, the differences in performance due to the size of the school systems are greatly increased. A number of important duties, such

<sup>1</sup> Seventh Year Book, Department of Elementary School Principals, National Education Association, p. 189.

<sup>2</sup> Morrison, J. Cayce, *The School Principalship of Ohio Cities and Exempted Villages*, The Ohio State University Contribution to School Administration, vol. 2, no. 17, May 15, 1926, p. 45, Table 37.

as "meet with the board regularly" (100-96-100-100),<sup>1</sup> "prepare rules and regulations" (86-94-93-92), "order school supplies" (93-92-96-92), and "plan beautification of school grounds" (82-79-82-84) are performed by essentially the same relative numbers of superintendents regardless of small or large school enrollments.

#### *Size of School Affects Duties*

Other administrative duties, on the contrary, are markedly influenced by the size of the school population. Some of the more pronounced variations are shown in Table III. A number of duties such as "employ and dismiss teachers" (67-77-90-92), "arrange a diagnostic testing program" (46-58-69-80), "arrange salary schedule for teachers" (46-73-75-92), "select books for teachers' professional library" (28-50-59-84), and "attend educational meetings at the expense of the school board" (38-44-42-68) exhibit tendencies toward more common performance the larger the enrollment in the school system. Other duties such as "keep record of pupils' school work" (78-67-48-46), "schedule work of pupils in high school" (78-79-65-45), "make out daily schedule of high school" (82-83-65-52) and a few others

requiring the greatest amount of their time. The responses were tabulated and the results are shown in Table IV. For the entire group the duties requiring the most time were those relating to correspondence, keeping records, making out reports, collecting tuition and checking attendance of pupils. There is a decided decrease in the percentile performance of certain clerical duties by the superintendents in going from smaller to larger schools. This decrease in duties performed corresponds closely with the increase in office assistance furnished the superintendents. The percentages of full-time office clerks furnished in the four classes of schools are 0, 4, 14 and 24, and of part-time clerks, they are 7, 10, 24 and 28, respectively.

#### *Adequate Office Equipment Necessary*

There is a close relation between the decrease in time consumed by certain clerical duties with the increase in office equipment furnished the superintendents. The data presented in Table V show that the percentages of the schools in the four classes of schools that are furnished with duplicating machines of any sort are 50, 75, 79 and 80, respectively. The percentages of schools in the

TABLE IV—CLERICAL DUTIES CONSUMING THE MOST TIME OF THE SUPERINTENDENTS OF SMALL SCHOOL SYSTEMS IN TEXAS\*

Duty	Percentile Performance in Schools With Enrollment of				Total
	1	2	3	4	
	399 or Fewer	400 to 699	700 to 999	1,000 or More	
1. Correspondence .....	81	72	90	91	84
2. Keeping records of pupils' school work.....	67	66	40	36	55
3. Checking, studying and making reports.....	0	45	30	72	40
4. Collecting tuition and keeping records of it..	37	30	20	11	26
5. Keeping books, financial records, etc.....	12	18	20	5	15
6. Checking attendance of pupils.....	5	18	10	11	12
7. Business matters, paying accounts, etc.....	11	3	10	16	12
8. Writing minutes of school board.....	6	6	10	11	8
9. Collecting, classifying data on applications..	0	9	10	11	8
10. Preparation of rules, regulations and notices.	15	3	5	0	6
11. Making out pay roll .....	5	6	0	6	5
12. Cutting stencils and operating mimeograph.	0	6	10	0	5

\*Distributed according to enrollment. The figures indicate the percentage of superintendents performing each duty.

exhibit tendencies toward less common performance the larger the school system. These striking tendencies in one direction or the other afford substantial evidence of the deep-rooted differences that exist in the administrative organization in different sized school systems.

The superintendents cooperating in this study were requested to list the three clerical duties

four groups furnished with adding machines are 7, 25, 22 and 28, respectively. The percentages of superintendents provided with slide rules are 7, 12, 11 and 24, respectively. The schools furnished with telephones in the superintendents' offices in the four groups are 57, 82, 85 and 100 per cent, respectively. It seems reasonable to assert that all superintendents included in this study should be furnished with the equipment listed in Table V, as a minimum. It is poor business to pay a super-

<sup>1</sup> The figures in parentheses represent the percentile performances in the four respective groups or classes of school systems.



intendent a salary calling for executive ability and then fail to furnish him with sufficient office equipment to do his work efficiently and economically.

One hopeful tendency revealed by Table V is the relatively large number of superintendents provided with professional libraries. Fifty-five per cent of the entire group have such libraries. Here, as in many other worth while items, there is a direct correlation between the size of the school and the number provided with professional libraries. The percentages of schools in the four

none. There is little doubt that a superintendent's efficiency is materially affected by the office equipment and clerical help provided for him. School boards may well give these items more serious attention.

In summarizing the study, it is found that:

1. The administrative duties most frequently performed by superintendents in small cities have to do with the school board, preparing reports, assignment of duties to employees, organization of school departments, financial and business matters and the discipline and attendance of pupils.

TABLE V—OFFICE EQUIPMENT FURNISHED THE SUPERINTENDENTS OF SMALL SCHOOL SYSTEMS IN TEXAS\*

Item	Class of School				Total
	1 399 or Fewer	2 400 to 699	3 700 to 999	4 1,000 or More	
1. Typewriter .....	75	98	86	96	88
2. Bookcase .....	82	78	82	100	82
3. Telephone .....	57	82	85	100	80
4. Filing cabinets .....	75	84	76	92	80
5. Bulletin board .....	72	76	74	88	76
6. Work table .....	57	75	74	88	71
7. Clock and bell system .....	50	88	71	88	66
8. Mimeograph .....	25	75	79	80	64
9. Hectograph .....	50	42	45	52	45
10. Other duplicating machines .....	29	33	11	28	26
11. Professional library .....	36	58	55	68	55
12. Professional library magazine racks .....	33	42	31	44	37
13. Adding machine .....	7	25	22	28	18
14. Slide rule .....	7	12	11	24	13
15. Vault .....	0	11	7	36	12
16. Safe .....	0	15	7	16	10

\*Distributed according to enrollment. The figures indicate the percentage of superintendents furnished with each item.

classes provided with such libraries are 36, 58, 66 and 68, respectively.

It is apparent that there is a lack of essential equipment in the offices of the superintendents of small school systems in Texas. One can scarcely conceive of a professionally minded superintendent who would not need a bookcase in his office, yet there were 18 per cent of the entire group who had none. A typewriter is an essential piece of office equipment even though there may be no stenographic help, yet there were 25 per cent in Class 1 who had no such equipment. Several superintendents, moreover, who reported typewriters, stated that they owned them. To keep school records adequately, filing cases are necessary, yet there were 25 per cent in Class 1 and 20 per cent of the whole group who had none. A superintendent without telephone connection with his community scarcely belongs to the present day, yet 43 per cent in Class 1 and 20 per cent of the total had no such service. Duplicating machines are invaluable, yet 36 per cent of the superintendents had

2. The administrative duties consuming the most time correspond fairly closely with those that are most frequently performed.

3. The size of the school influences the number and type of duties performed by superintendents and principals. In the largest and smallest schools superintendents perform fewer administrative duties than do those in schools that are of average size.

4. There is a marked tendency toward the increase in the performance of certain duties by superintendents as a school system grows larger, but there is also a marked decrease in the performance of certain other duties.

5. The larger the school the greater is the number of duties delegated in whole or in part to principals.

6. Time spent by superintendents on clerical duties is saved by suitable office equipment.

7. Superintendents of small school systems give too much time to minor administrative details.

# What Qualities Are Prerequisite to Success in Teaching?

By A. S. BARR, DEPARTMENT OF EDUCATION, UNIVERSITY OF WISCONSIN, AND LESTER M. EMANS, SUPERINTENDENT OF SCHOOLS, LANCASTER, WIS.

PROF. W. W. CHARTERS lists in his "Commonwealth Teacher-Training Study"<sup>1</sup> eighty-three traits of character and personality and 1,001 activities of importance in the training of teachers. His data were derived from a comprehensive survey of current theory and practice of teaching.

<sup>1</sup> Charters, W. W., and Waples, Douglas, *The Commonwealth Teacher-Training Study*, Chicago, The University of Chicago, 1929.

It is the purpose of the investigation reported in this article to study the qualities and activities prerequisite to teaching success from a slightly different point of view, and to compare the findings with those of the Charters investigation. The data are derived from an analysis of 209 rating scales. These scales were collected from cities of more than 25,000 inhabitants, from state departments of public instruction and from de-

TABLE I—TRAITS AND ACTIVITIES OCCURRING WITH A

Number of item	Item	Frequency	Number of item	Item	Frequency
1	Instruction .....	261	48	Adaptability .....	35
2	Classroom management .....	164	49	Skill in stimulating thought .....	35
3	Professional attitude .....	157	50	Economy of time .....	34
4	Choice of subject matter .....	147	51	*Habits .....	34
5	Personal habits .....	151	52	Lesson planning .....	34
6	Discipline .....	125	53	Vitality .....	34
7	Appearance of the room .....	120	54	Accuracy .....	32
8	Personal appearance .....	118	55	Cooperation with school .....	32
9	Cooperation .....	103	56	*Pupil participation .....	32
10	Health .....	101	57	Self-reliance .....	32
11	Voice .....	96	58	Cooperation with community .....	31
12	Professional growth .....	94	59	Reliability .....	31
13	Use of English .....	87	60	Skill in presentation .....	31
14	Skill in assignment .....	86	61	Drill .....	30
15	Definiteness of aim .....	85	62	Effort to improve .....	30
16	Tact .....	79	63	Judgment .....	30
17	Initiative .....	78	64	Appearance .....	29
18	Personality .....	76	65	Teaching ability .....	29
19	Loyalty .....	74	66	Teaching material .....	29
20	Promptness .....	71	67	Attitude toward criticism .....	28
21	Daily preparation .....	69	68	Care of school property .....	28
22	Results .....	68	69	Professional interest .....	28
23	Enthusiasm .....	67	70	Records .....	28
24	Scholarship .....	67	71	Intellectual capacity .....	27
25	Skill in questioning .....	67	72	Interest in life of community .....	27
26	Attention to individual needs .....	65	73	Sympathy .....	27
27	Motivation .....	65	74	Cooperation with other teachers .....	26
28	Self-control .....	61	75	*Pupil reaction .....	26
29	*General development of pupils .....	60	76	*Pupil-teacher cooperation .....	25
30	Skill in teaching how to study .....	60	77	Sense of justice .....	25
31	Routine .....	55	78	Sincerity .....	25
32	Professional reading .....	53	79	Ability to meet patrons .....	24
33	Social qualities .....	52	80	Courtesy .....	24
34	Skill in habit formation .....	50	81	Executive ability .....	24
35	Preparation .....	48	82	Fairness .....	24
36	Resourcefulness .....	48	83	*Growth of pupils in subject matter .....	24
37	Interest in lives of the pupils .....	47	84	Neatness .....	24
38	Professional equipment .....	47	85	Dress .....	23
39	Industry .....	46	86	Optimism .....	23
40	Professional preparation .....	43	87	Organization of subject matter .....	23
41	*Pupil achievement .....	41	88	Personal equipment .....	23
42	Care of ventilation .....	40	89	Technique of teaching .....	23
43	Reports .....	39	90	Understanding of children .....	23
44	Attendance .....	37	91	*Attention of class .....	22
45	Care of heat .....	36	92	Character .....	22
46	Care of light .....	36	93	Cooperation with supervisory officials .....	22
47	Teaching methods (devices) .....	36	94	Interest in work .....	22
			95	Poise .....	22
			96	Leadership .....	21
			97	Neatness of room .....	21

NOTE: The phraseology used to describe the several traits and qualities of teaching given in this table is identical with that of the rating scales from which the items were taken.

\*Pupil traits, qualities or activities.

partments of education in universities. In all, forty-six states were represented in the data analyzed.

Particular care was exercised in the analysis of these rating scales and in classifying the various items contained in them. Instead of following the conventional procedure of building first a classification scheme and of then forcing the different items into these preconceived groups, the two were built together. The separate items were first copied on 3 by 5-inch cards, one item on each card. There were, altogether, 6,939 such items. Those items identically worded were then thrown into the same class groups. There were 200 such groups with a frequency of five or more. The group headings for these 200 groups were then used to classify items not yet

classified. There were 2,950 such unclassified items. This second classification (Step 2) was made by three different individuals, each working independently of the others. Items unanimously assigned to the different class groups by these three workers were judged to be properly classified. There were, however, at the completion of Step 2, certain unassigned items. These were assigned (Step 3) by the three judges in conference. Finally a summary of the three tabulations was brought forward in a totals column (Step 4). These totals are presented in Table I.

Some attempt was made to estimate the objectivity of the procedure here followed by correlating the frequencies secured for the several items, one with another, for each of the four tabulations

#### FREQUENCY OF FIVE OR MORE IN 209 RATING SCALES

Number of item	Item	Frequency	Number of item	Item	Frequency
98	Punctuality .....	21	150	Ventilation .....	9
99	*Response of class .....	21	151	Ability to interest patrons .....	8
100	Knowledge of subject matter .....	20	152	Attractiveness of room .....	8
101	Moral influence .....	20	153	*Command of subject matter .....	8
102	Professional spirit .....	20	154	Preparation of daily work .....	8
103	Promptness of reports .....	20	155	Professional qualities .....	8
104	Tests (grading) .....	20	156	Stimulation of community .....	8
105	*Expression .....	19	157	Teaching skill .....	8
106	General appearance .....	19	158	Training .....	8
107	School management .....	19	159	*Achievements of pupils .....	8
108	Social service .....	19	160	Attention to light .....	7
109	Clearness of aim .....	18	161	Care of room .....	7
110	Culture .....	18	162	Care of routine .....	7
111	*Skills .....	18	163	General scholarship .....	7
112	Cheerfulness .....	17	164	Room conditions .....	7
113	Interest in life of the school .....	17	165	Selection of subject matter .....	7
114	Experience .....	16	166	*Achievement of pupils .....	6
115	Extra-curricular activities .....	16	167	Attention to heat .....	6
116	Management .....	16	168	Class management .....	6
117	Manner .....	16	169	Command of English .....	6
118	Teaching techniques .....	16	170	Habit formation .....	6
119	Hygiene conditions .....	15	171	Heat .....	6
120	Integrity .....	15	172	Interest in pupils .....	6
121	Progressiveness .....	15	173	Knowledge of subject .....	6
122	Sympathy with children .....	15	174	Lesson assignment .....	6
123	Character building .....	14	175	Light .....	6
124	Sense of humor .....	14	176	*Participation of class .....	6
125	Social equipment .....	14	177	Professional .....	6
126	*Thinking ability .....	14	178	Subject matter .....	6
127	Assignment .....	13	179	Ability to discipline .....	5
128	Care in assignment .....	13	180	Accuracy of reports .....	5
129	Disposition .....	13	181	*Attitude of class (in doubt) .....	5
130	Grasp of subject matter .....	13	182	Attention to individual differences .....	5
131	Skill in motivating work .....	13	183	Attention to routine .....	5
132	Team work .....	12	184	Class control .....	5
133	Technique .....	12	185	Community interest .....	5
134	Academic preparation .....	11	186	Conclusiveness .....	5
135	Energy .....	11	187	General health .....	5
137	Class discipline .....	10	188	Governing skill .....	5
138	Control of class .....	10	189	Personal characteristics .....	5
139	Growth .....	10	190	Posture .....	5
140	*Ideals .....	10	191	*Power of expression .....	5
141	Originality .....	10	192	Preparation of work .....	5
142	Personal .....	10	193	Professional training .....	5
143	Skill in teaching .....	10	194	Questions .....	5
144	Vigor .....	10	195	Self-improvement .....	5
145	Attention to ventilation .....	9	196	Skill in drill .....	5
146	Cooperation with principal .....	9	197	Systematic routine .....	5
147	*Development of effective habits of study .....	9	198	Teaching .....	5
148	Housekeeping .....	9	199	Teaching how to study .....	5
149	Personal qualifications .....	9	200	Thoroughness of drill .....	5



TABLE III—MAJOR DIVISIONS OF THE CHARTERS LIST OF TEACHERS' ACTIVITIES\*

- I. Teaching Activities Involved in Classroom Instruction
  - A. Teaching subject matter
    1. Planning
    2. Setting up objectives
    3. Selecting and organizing subject matter
    4. Developing interests
    5. Instructing
    6. Assigning work
    7. Providing sufficient opportunity for pupils' activities
    8. Providing facilities for individual study
    9. Investigating pupils' needs, abilities, and achievements
    10. Exhibiting useful teaching traits
  - B. Teaching pupils how to study
- II. Teachers' Activities Involved in School and Classroom Management
  - A. Recording and reporting information concerning pupils
  - B. Activities involving contacts with pupils
- III. Teachers' Activities Involving Supervision of Pupils' Extra-Classroom Activities
  - A. Informal contacts with pupils
  - B. Supervision of athletics, social activities, etc.
- IV. Activities Involving Relationships with the Personnel of the School Staff
- V. Activities Involving Relations with Members of School Community
- VI. Activities Concerned with Professional and Personal Advancement
- VII. Activities Concerning School Plant and Supplies

NOTE: The items here listed are taken directly from Charters' full list of Teachers' Activities; they constitute the major divisions of this outline. The items of this outline are offered for purposes of comparison with those listed in Table II.  
 \*Charters, W. W., and Waples, Douglas, *The Commonwealth Teacher-Training Study*, Chicago, The University of Chicago Press (1929), pp. 304-472.

above described. The correlations between the four tabulations were as follows: exact matchings (Step 1) and independent classification (Step 2),  $.86 \pm .015$ ; exact matchings (Step 1) and conference (Step 3),  $.77 \pm .021$ ; exact matchings

(Step 1) and final classification,  $.74 \pm .023$ . The conventional classification with its imposed scheme of classification means little. The procedure here pursued was followed with the hope that a more usable classification might be de-

TABLE IV—A COMPARISON OF THE CHARTERS RANK LIST OF TEACHERS' TRAITS AND THE BARR-EMANS LIST

Traits	Rank for Teachers of:				Rural School	Average Rank	Barr-Emans List
	Grades X-XII Senior H. S.	Grades VII-IX Junior H. S.	Grades III-VI Intermediate	Grades Kdg.-II Primary			
1. Adaptability .....	8	10	8	6	1	7	13
2. Attractiveness, personal appearance .....	17	14	9	10	15	13	3
3. Breadth of interest (interest in community, interest in profession, interest in pupils) ....	1	10	11	15	2	8	4
4. Carefulness (accuracy, definiteness, thoroughness) .....	11	13	9	14	12	12	18
5. Considerateness (appreciativeness, courtesy, kindness, sympathy, tact, unselfishness) ..	17	3	1	1	3	5	5
6. Cooperation (helpfulness, loyalty) .....	11	9	14	16	3	11	1
7. Dependability (consistency) .....	14	19	16	17	15	22	19
8. Enthusiasm (alertness, animation, inspiration, spontaneity) .....	9	4	5	2	11	6	12
9. Fluency .....	23	24	25	23	25	24	9
10. Forcefulness (courage, decisiveness, firmness, independence, purposefulness) .....	5	4	18	19	13	12	23
11. Good judgment (discretion, foresight, insight, intelligence) .....	2	1	3	4	3	3	20
12. Health .....	16	16	12	10	9	13	8
13. Honesty .....	7	12	7	9	6	8	22.5
14. Industry (patience, perseverance) .....	19	8	14	13	17	14	17
15. Leadership (initiative, self-confidence) .....	4	7	19	21	8	12	6
16. Magnetism (approachability, cheerfulness, optimism, pleasantness, sense of humor, sociability, pleasing voice, wittiness) .....	11	4	5	3	9	6	2
17. Neatness (cleanliness) .....	20	16	13	4	18	14	21
18. Openmindedness .....	9	20	23	24	22	20	24.5
19. Originality (imaginativeness, resourcefulness) ..	22	22	16	12	19	14	14
20. Progressiveness (ambition) .....	23	23	22	20	22	22	22.5
21. Promptness (dispatch, punctuality) .....	21	14	20	18	21	19	7
22. Refinement (conventionality, good taste, modesty, morality, simplicity) .....	14	20	2	8	13	11	15
23. Scholarship (intellectual curiosity) .....	5	16	21	21	20	17	10
24. Self-control (calmness, dignity, poise, reserve, sobriety) .....	2	2	3	6	6	4	11
25. Thrift .....	25	25	24	25	24	25	24.5

TABLE II—A TYPICAL SCALE FOR THE RATING OF TEACHERS

	Frequency
I. Classroom Management (general) (2, 107, 116, 168) .....	205
1. Attention to physical conditions .....	x
(a) heat (45, 167, 171) .....	48
(b) light (68, 160, 175) .....	49
(c) ventilation (42, 145, 150) .....	58
2. Housekeeping and appearance of room (7, 97, 119, 148, 152) .....	173
3. Discipline (6, 137, 138, 179, 184, 188) .....	160
4. Economy of time (50) .....	34
5. Records and reports (43, 70) .....	67
6. Attention to routine matters (31, 162, 183, 197) .....	72
II. Instructional Skill (general) (1, 47, 89, 118, 133, 143, 157, 198) .....	371
1. Selection and organization of subject matter (4, 87, 165) .....	177
2. Definiteness of aim (15, 109, 161) .....	110
3. Skill in assignment (14, 127, 128, 174) .....	118
4. Attention to individual needs (26, 182) .....	70
5. Skill in motivating work (27, 131) .....	78
6. Skill in questioning (25, 194) .....	72
7. Skill in directing study (30, 199) .....	65
8. Skill in stimulating thought (49) .....	35
9. Daily preparation (lesson planning) (21, 52, 154, 192) .....	116
10. Skill in presenting subject matter (60, 87) .....	54
11. Pupil interest and attention (91) .....	22
12. Pupil participation (56, 176) .....	38
13. Attitude of pupils (75, 76, 181) .....	56
14. Results (in one form or another) (22, 29, 41, 51, 83, 111, 126, 140, 147, 153, 159, 166, 191) .....	305
III. Personal Fitness for Teaching (general) (5, 18, 33, 88, 117, 125, 129, 142, 149, 189) .....	369
1. Accuracy (carefulness, definiteness, thoroughness) (54, 180) .....	37
2. Adaptability (48, 65) .....	64
3. Attitude toward criticism (67) .....	28
4. Considerateness (appreciativeness, courtesy, kindness, sympathy, tact, unselfishness) (16, 73, 80, 122) .....	145
5. Energy and vitality (53, 135, 144) .....	55
6. Enthusiasm (alertness, animation, inspiration, spontaneity) (23) .....	67
7. Fairness (sense of justice) (77, 82) .....	49
8. Forcefulness (courage, decisiveness, firmness, independence, purposefulness) (186) .....	5
9. Good judgment (discretion, foresight, insight, intelligence) (63) .....	30
10. Health (10, 187) .....	106
11. Honesty (integrity, dependability, reliability) (59, 120) .....	46
12. Industry (patience, perseverance) (39) .....	46
13. Leadership (initiative, self-confidence, self-reliance) (17, 57, 96) .....	131
14. Loyalty .....	x
15. Morality (92, 101, 123) .....	56
16. Openmindedness .....	x
17. Optimism (cheerfulness, pleasantness, sense of humor, wittiness) (86, 112, 124) .....	54
18. Originality (imaginativeness, resourcefulness) (36, 141) .....	58
19. Personal appearance (8, 64, 84, 85, 106) .....	213
20. Posture (190) .....	5
21. Progressiveness (ambition) (121) .....	15
22. Promptness (dispatch, punctuality) (20, 98, 103) .....	112
23. Refinement (conventionality, good taste, modesty, simplicity) .....	x
24. Self-control (calmness, dignity, poise, reserve, sobriety) (28, 95) .....	83
25. Skill in expression (13, 169) .....	93
26. Sociability (33) .....	52
27. Thrift .....	x
28. Understanding of children (90) .....	23
29. Voice (pleasing) (11) .....	96
IV. Scholarship and Professional Preparation (24, 35, 38, 40, 100, 110, 130, 134, 155, 158, 163, 173, 193) .....	301
V. Effort Toward Improvement (32, 62, 139, 195) .....	98
VI. Interest in Work, Pupils, Patrons, Subjects Taught, etc. (37, 69, 72, 94, 102, 113, 172, 185) .....	172
VII. Ability to Cooperate With Others (9, 55, 58, 74, 93, 132, 146) .....	285

NOTE: The numbers in parentheses following each quality or trait refer to the original number of the item in Table I. The data are presented in this manner to enable the reader to check the classification here proposed. Fifty-three hundred ninety-seven of the 6,083 total frequencies shown in Table I are accounted for in Table II.

rived. The many details pertinent to the procedure here briefly described are given in the original report.

The final classification is presented in Table I. Six thousand and eighty-three of the 6,939 original items, or 88 per cent, are accounted for in this table. Some internal evidence of the care exercised in classifying items can be secured from the table. Discipline (Item 6), class disci-

pline (Item 137), control of class (Item 138), ability to discipline (Item 179), class control (Item 184) and governing skill (Item 188), all of which obviously belong to the class group discipline, have been retained as separate groups in the original table (Table I). The succeeding step, namely, the building of a more compact classification (Table II), is, however, quite subjective. While care has been taken not to force

items into unnatural groups, the final summary is based upon the joint opinion of the authors. This shorter classification is offered for the purpose of making a comparison with Charters' master list which is presented in Table III. Table II, with the exception of section three—personal fitness for teaching—was derived quite independently of the Charters classification, the headings being, for the most part, taken directly from Table I.

#### *Studies Agree in Many Details*

Despite certain differences in the wording of group headings and differences in the methods of study employed in the two investigations (Tables II and III), one is struck by the great amount of agreement found in the two studies. A more detailed comparison of the character and personality traits derived from the two investigations is presented in Table IV. With the exception of the items, energy, vitality, vigor, sincerity, fairness, and sense of justice, there seem to be no major discrepancies between the two lists. The rankings for the twenty-five items compared in Table IV are not in close agreement—the correlation is approximately .40—but this is of no importance for the present study. A study of the Charters check list or of the present analysis should improve the content of rating scales.

The general impressions and conclusions that are to be gained from this study are listed here.

In the first place, one is impressed by the great variety of terms used to characterize teaching and teaching ability. Two hundred items occurred five or more times; certain items occurred with a frequency of less than five.

The items found in the rating scales analyzed were, for the most part, highly subjective and undefined.

The 209 rating scales analyzed varied widely in content and organization. Many of the scales analyzed seemed only partially complete, seeming to represent special points of view or systems of teaching.

One also gets the impression from the data presented that teaching is an exceedingly human task, the social and personal traits surpassing both in frequency and consistency of mention all other traits enumerated in the study. In this conclusion the investigation supports the findings of Knight, Somers, Whitney and others who have studied the subject.

A composite scale derived from this study compares favorably with the Charters activities check list in content.

## Additional Tax Proposed for New Jersey Schools

A consideration of sales and luxury taxes was proposed by Charles H. Elliott, commissioner of education for New Jersey, in a recent statement analyzing the sources of state revenue available for educational purposes.

"The amount of money distributed to the schools is made up of the state school tax, the income from the state school fund, the railroad tax less certain deductions authorized by law and several minor sources of income," Doctor Elliott explained.

"A formulation of policy with reference to the state's participation in education must include a consideration of the question of what proportion of the total school budget of the state may be expected reasonably to come from state sources," he declared. "Such a policy must include also a distribution mechanism which will ensure adequate but not extravagant education for those districts that experience great difficulty in maintaining effective schools with their present ratables. It seems to me that we may well examine means of making available sources of revenue not hitherto utilized, such as sales and luxury taxes, despite certain economic objections to them as a part of any plan that seeks to increase the state allotment for the purpose of easing, in part, the local tax burden."

## How One School Reduced Its Instructional Costs

The cost per capita for instruction in Rockford, Ill., was reduced 88 cents per pupil for the school year, 1929-30, over the cost per capita for the previous school year, says a recent announcement. This is an unusual showing in view of the fact that a salary schedule went into effect the second semester which granted an average of a 7 per cent increase to all teachers in the school system.

This reduction was made by cutting down on the supervisory staff in the superintendent's office and placing the responsibility of supervision on the building principals. A workable supervisory staff is still maintained which acts only in an advisory capacity to the principals.

The size of classes was slightly increased over the previous year, with the result that size of classes in different departments for the school year 1929-30 averaged as follows: senior high school, 24 pupils per teacher; junior high school, 31 pupils per teacher; elementary school, 36 pupils per teacher.





## Where Crippled Children Are Taught to Lead Normal Lives

*The school described in this article was planned with the intention of encouraging the crippled child to develop himself in spite of his infirmity*

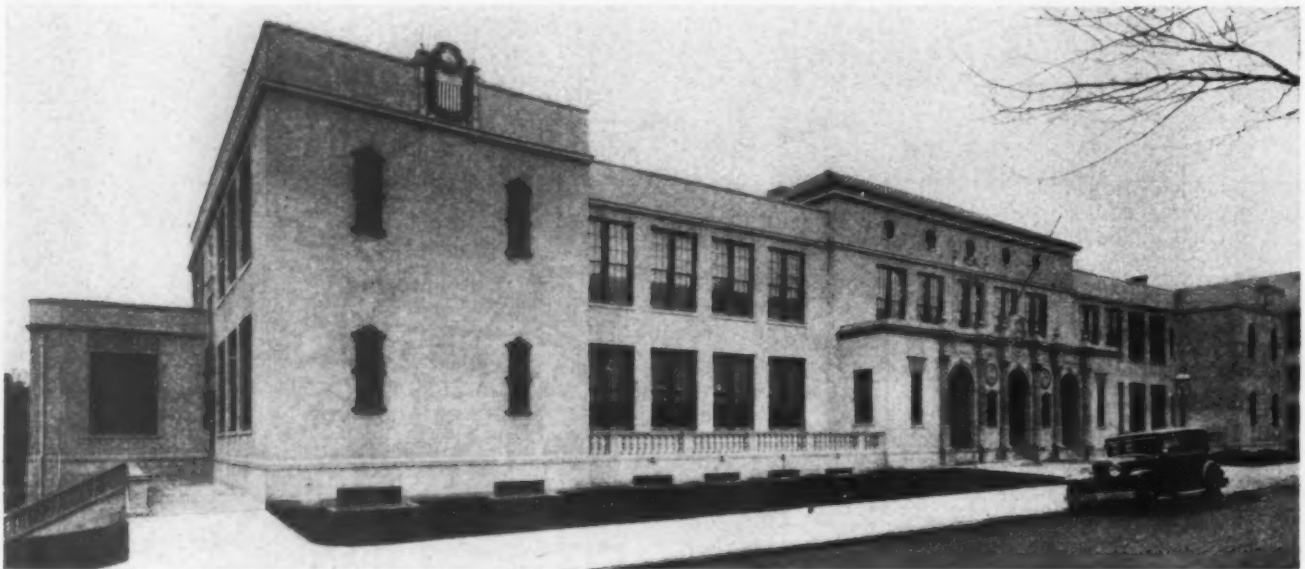
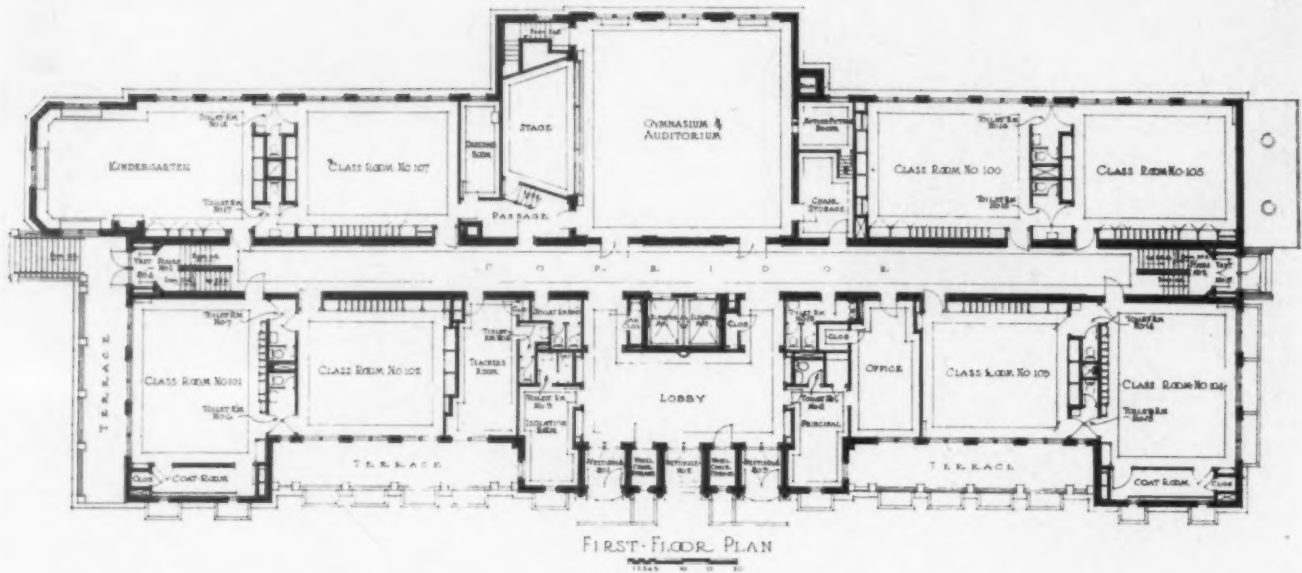
BY H. ELDRIDGE HANNAFORD, SAMUEL HANNAFORD & SONS, ARCHITECTS, CINCINNATI

THE School for Crippled Children, Cincinnati, though constructed and administered by the board of education, is nevertheless a unit of the comprehensive medical service that exists in the city, and is therefore closely allied with the Cincinnati General Hospital and the college of medicine of the University of Cincinnati.

At the outset careful consideration was given to what might be termed the basic philosophy of plan. Schools for crippled children in other portions of the country were carefully studied and analyzed, and it seemed as though all of the existing institutions overstressed convenience of ar-

rangement and appointments for the crippled child. In other words, they accepted the child's infirmity and endeavored to make things as easy as possible for him instead of attempting to approximate ordinary conditions and, by so doing, develop the child's initiative to meet and overcome normal obstacles.

Instead of the more common one-story type of school, it was therefore determined to erect a multistory building with stairs instead of ramps, so that the crippled child would be encouraged to learn to use stairs and to develop himself in spite of his infirmity. Of course the fact was recognized that certain children were practically



*The entire floor plan arrangement and a view of the School for Crippled Children, Cincinnati, are shown here.*





*To develop the initiative of the crippled child, the classrooms have been arranged to resemble in every way rooms in a school for normal children.*

helpless and elevators were installed and wheel chairs provided to take care of such cases. .

With this important decision as a point of departure, the school as developed is more or less the typical school, with additional features for convenience and treatment.

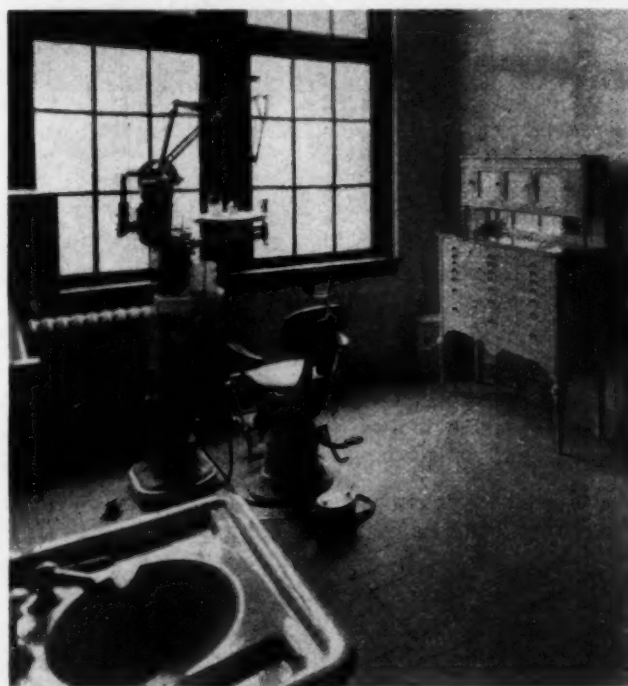
The typical classroom does not differ in any way from that of a school caring for normal healthy children, except that private toilets have been introduced between each pair of rooms. The main entrance lobby has three vestibules, two of which are on a level with the floors of the busses that convey the children to and from the school. These busses can be backed against the vestibule entrances and the children can enter the school without being exposed to the weather. In connection with these entrance vestibules are large closets for the storage of wheel chairs.

To encourage any child who is at all capable of helping himself, hand rails have been placed on both sides of all corridors. There is also provided as a part of the school a garage large enough to accommodate the school busses.

Special suites have been arranged for giving all sorts of physiotherapeutic treatments. As body weight is considerably reduced in water and the difficulty of exercise consequently lessened, there is a small tank room in the basement where the children may indulge in certain corrective exercises while in the water.

The first floor is substantially a typical school floor. The second floor is almost entirely given over to the special treatment suites. These consist of an orthopedist's examining room, on one

side of which is a treatment room and on the other side a plaster room, where casts may be made or changed or special splints applied. Another suite, similar to the orthopedist's, houses the pediatricians. Here examinations are made and proper treatments carried out in the treatment room adjoining the examining room. These treatments consist primarily of sun lamp exposures, baking, massage and corrective exercises. A part of each day is given over to this work.

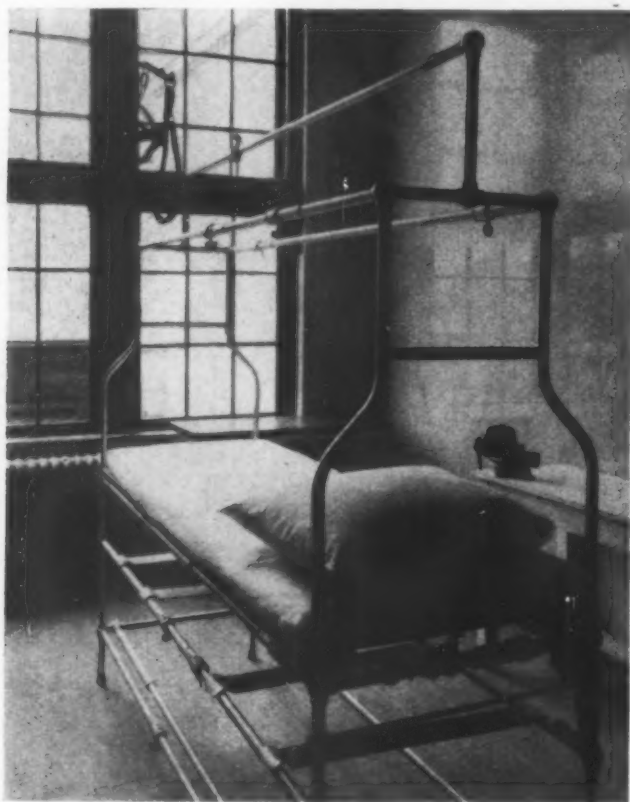


*All children are regularly examined and treated in the dental clinic.*



All children are regularly examined and treated in the dental clinic, where in addition to the ordinary filling and cleaning of teeth necessary orthodontic work is done. In connection with the general dental treatment room a small laboratory and dark room have been provided for x-ray work and the making of impressions and corrective appliances.

The building faces north and at the southeast and southwest corners are open air classrooms where the children are required to spend a cer-



*In the plaster room, a part of the orthopedist's suite, casts and splints are made and applied.*

tain portion of each day, either at play or on cots for a definite rest period. In conjunction with these open air classrooms are large closets containing extra blankets or heavy outdoor clothing for the children to use during the winter months. The rooms have glazed doors so that they can be closed up on occasion and used as ordinary classrooms. The glass in these doors permits the penetration of the ultraviolet portion of sunlight.

In this school great stress has been placed on vocational training, and the children are encouraged in every way to learn some useful occupation intended to make them self-supporting, or partially so, in after life. This vocational training suite occupies the entire north front of the second floor between the two end classrooms. On the boys' side there is a room for general con-

struction work, where furniture making, toy making and similar manual training are taught. In conjunction with this room are auxiliary rooms for the sanding, painting and general finishing of the pupils' work. On the girls' side a well arranged kitchen provides for instruction in the household arts, and there have also been included a large sewing room and fitting room for instruction in dressmaking.

Practically all of the pupils' work is for sale, and many special orders are taken. This requires rooms for the storage of finished work and another room for packing and preparing work that is on order for shipment. In the first floor lobby are special exhibition cases displaying outstanding work by the pupils, and these form a most attractive feature of the main entrance.

During the short time that the school has been in service the results have been highly encouraging, and it would seem that the general premise upon which the plan theory was based is a proper one. All children who have come to this school have been taught to overcome their difficulties as far as possible and in so doing have developed self-reliance which has been of great value not only to their physical well-being but also in raising their morale to a point where they seem much less conscious of their affliction than if the affliction had been accepted and everything made as easy as possible for them.

It is of course obvious that the personnel in charge of such an institution must be of the highest type, and in this the board of education has been particularly fortunate. A large share of the credit for the school's success is directly due to the sympathetic and intelligent handling of the problem of the crippled child by the teaching, nursing and medical personnel connected with it.

This school is equipped to take care of approximately 250 children.

### On the Safety of the Artificial Swimming Pool

The sanitary control of bathing beaches and wading pools is improving, and the sanitation of sand beaches, especially in artificial pools, is receiving better attention, according to a statement issued by the Public Health Service.

The sanitary artificial swimming pool is one of the safest places in the world, so far as water borne diseases are concerned, it was said, and the sanitation of swimming pools dates from the adoption of refiltration and chlorination some twenty years ago.

# How to Cooperate Effectively With Outside Organizations\*

*Much of the success of the school executive depends upon the extent to which he works with others—his associates as well as the business and professional groups in his community*

BY JOHN H. BEVERIDGE, SUPERINTENDENT OF SCHOOLS, OMAHA, NEB.

IT is scarcely possible for the person who holds an administrative position to speak on an educational topic to-day unless he first defines the terms of the topic or at least gives a suggested meaning to such terms insofar as his discussion is concerned. This is necessary in order that he may be properly or at least partly understood. The terms that command attention in this discussion are "cooperate," "efficiently" and "outside."

As used in this discussion, "cooperate" means, as it literally does, working together. It is assumed that there are at least two individuals or organizations concerned, the party of the first part and the party of the second part and that each party must cooperate in the undertaking. Too often it is assumed that one party is to do all the cooperating. In order to cooperate properly one must be willing to give and to take, to win and to lose, to consider and to be considerate of others. Many men who are engaged in administrative work say there are still some superintendents who talk glibly on the subject of cooperation but who are autocratic in practice.

## *How to Win Cooperation*

To cooperate effectively means to do that which will redound to the welfare of the child, physically, mentally, morally, socially and spiritually, and that which will aid in the way of individual and group welfare. Effectiveness means there is first a cause and second a result. The administrator of a school system is the cause of many worthy results. He must not only know and understand situations and conditions but he must win and hold the confidence of his people, his associates—principals, teachers, supervisors—and other professional and business people in his community. He and his associates must not only know but must be able and willing to do.

How shall effective cooperation be secured? We are executives. We accept this question as per-

sonal. First of all, the executive must have an understanding mind; second, he must have a willing, charitable heart. The value of an understanding mind is well known in the several activities of life. But we need to place a renewed emphasis upon the significance of this value. The Bible has emphasized the value of understanding. Job asked that he should be taught to hold his tongue and caused to understand wherein he had erred. Job's philosophy should be practicable for a school superintendent. Out of the mouth of the administrator must come knowledge, and the kind of knowledge that comes will depend upon whether he has an understanding mind.

## *The Value of an Inventory*

It is well to take an inventory. In merchandising it was formerly the custom to take an inventory at the beginning of the year; now the custom is to have a daily inventory. Might it not be well for each one of us to follow this plan of the mercantile institution and take a daily inventory of our activities so that we may cooperate more effectively? We are all familiar with the outside activities usually considered: the Chamber of Commerce, greater city committees, noonday clubs, Rotary and Kiwanis clubs, professional men's clubs, college clubs, symphony, psychological and philosophical societies, Boy Scouts, Girl Scouts, Campfire Girls, Young Men's and Young Women's Christian Associations, Knights of Columbus, Jewish community centers and the other similar civic, social and religious organizations.

What are some of the principles underlying effective cooperation? A few of the more important may be indicated. It is necessary for the school man to have some knowledge of the objects and purposes of the organizations with which he is to cooperate. A prominent business man in this country made the statement a short time ago that 30 per cent of the success of any business is due to the business man's knowing his business and 70 per cent to conducting it in harmony with his environment. Conditions in business are chang-

\*Address delivered at the meeting of the Department of Superintendence in Atlantic City.



ing. Twenty per cent of our business, states a reliable report, now comes from industries and products unknown ten years ago.

In turn, such organizations are to have or to secure from the administrator the objects and the purposes of the school system with which he is affiliated. We find such knowledge and such understanding to be the essential point in all businesses and in all occupations. We can only understand business, professional and social organizations by knowing some of the changes taking place in such organizations. Changes are coming so rapidly that one can only understand by keeping sufficiently abreast of changing conditions in the several activities of life. In this connection it is well to recall such books as "Education for a Changing Civilization" and "Changing Conceptions in Education."

How different is the problem to-day in dealing with extra-curricular activities from the problem of even ten or twenty years ago.

The second principle is that the administrator should first of all do his own job so well that he will not only get but merit the respect of his associates and patrons by the thoroughness of his work. Nothing will contribute more to successful and effective cooperation than letting the community know that the schools are well organized and doing effective work. Not only the administrator but the several associates on his staff should make it a fundamental principle that whatever work they may undertake in connection with outside organizations will be so well and thoroughly done that it will command the respect of the people in those organizations.

#### *Recognizing Ability in Associates*

To illustrate: In a certain Western city a member of the staff was assigned to work as a member of a committee on a jubilee celebration. The chairman of this committee was an unusually successful business executive who said in the presence of the committee that the most effective work done on his committee was by the member representing the public schools of that city. This member was not a superintendent of schools but an assistant. It was gratifying to the school system and helpful to the school to know that the work had been so effectively done that it commanded the respect of every member of the committee and that each recognized and appreciated the splendid service of this member of the executive staff. One should recognize the principle that when one is assigned to a duty no task is too menial to elicit the best service.

This leads to a third principle which is significant. The administrative officer should delegate

to his associates much of the service that is to be rendered and should give due credit to each associate for what he accomplishes. There is no better test of an executive than the way in which he treats his associates who hold nominally subordinate positions in the organization. It is the part of a good executive to select people who can work in the various departments better and more effectively than he. There have been executives who, it seems, want always to take the credit to themselves. This is a gross error and an almost unpardonable mistake. Better and more effective service is rendered when credit is given the one doing the work. This will encourage him and he will learn never to disappoint either the executive or the organization.

#### *The Importance of Personal Contact*

I know of a school system where, when calls are made for public speakers, the superintendent names members of his own organization specially adapted to the undertaking and rejoices always in their success. He knows enough to know that certain of his associates can speak more effectively than he. All due credit is given to them for such duties performed. This superintendent stated to me that he marvels at the ability discovered in some of his associates.

May I cite here a personal illustration in line with this superintendent? The elementary division of the classroom teachers the present year have been presenting papers and discussions to a large group, varying from 200 to 700 teachers. One of those teachers, a modest and retiring person, delivered a speech to an audience a few weeks ago that was a marvel in organization, thought and effectiveness of delivery. There is no better way to make this thought effective than to quote from one of the largest business executives this country has ever known. He said, "Eliminate from your vocabulary the word perfunctory." Possibly we should add, "And have confidence in your associates from the lowest position to the highest."

Charles M. Schwab said that he never made any money when the so-called boss (meaning himself) was on the job; that he always assigned to his first men in the executive positions work to be done, with freedom to do it; that he really paid them no salary except what the balance sheet showed. Such confidence is worthy of our consideration as executives.

The school executive must recognize the principal of ability in placing responsibility and must give the personnel of his own organization as well as the personnel of the organizations with which he is cooperating the opportunity to grow and



to develop. A great executive must remember his associates have ability.

Probably no factor is more important in effective cooperation than the point of personal contact—that the superintendent and the other members of the personnel with whom he is associated shall be distinctly human in their relations with other people. When Howard Elliott became president of the New Haven railroad he humanized the property. He took the people into his confidence. Those who opposed the organization first sympathized with, then supported him. We must be human and have faith in other people. When Owen D. Young became chairman of the board of directors of the General Electric Company he said, "We have been spending too much time in endeavoring to conserve a little copper here, a little tungsten there and a burr or a bolt somewhere. We must now conserve men." A somewhat similar statement was made in my hearing by three presidents of three separate railroads within the last year. The president of a piano factory that was almost on the verge of failure reorganized his company on the basis of this principle. The company returned to success. When the president was asked what was the secret of his success, he said, "We have ceased to manufacture pianos; we are now making men." He might have added, "We are treating them like human beings."

Herbert S. Martin of England in a farewell address at the Fifth National Training Conference of Scout Executives said, "I appreciate the warmth of your kindness. It has meant a lot to me to have corresponded with you for a number of years, but it is the human touch that means everything to all of us."

### What the Consolidated School Means to the Rural Community

"With the establishment of the consolidated school has come a broadened opportunity to rural boys and girls," says R. C. Williams, director of research, department of public instruction, Iowa, in an article in the *United States Daily*.

He points out that such expansion has enriched the educational offerings of these communities in many ways and has awakened a keener interest in the work of the public school. In all these phases of school activity, the kind of instruction which is provided should be given first consideration.

"It must not be taken for granted that the setting up of a consolidated or centralized school inherently assures a high type of instruction," Mr. Williams continues. "It merely means that

certain conditions which have limited the instructional possibilities in the small one-teacher rural school have been removed. It means that the advantages of the graded school have been extended to the isolated rural population.

"Efficient teaching is not obtained until those in charge of such schools shall have, through qualified leadership and wise planning, organized into a unified program of instruction the curriculum, teaching staff, supervision and other resources of the school which contribute to the teaching process."

He points out some of the factors that materially determine the success or failure of the program of instruction in the consolidated school as follows:

A curriculum, scientifically planned to meet the needs of the children and community served by the school, should be set up. The number of years of education to be offered should be as many as can be justified by the location of the school, the number of children to be educated and the ability of the district to support it.

The major factor is the teacher. Consolidated schools should attract better trained teachers than rural schools, keep them longer, and provide qualified instructors for vocational as well as academic subjects.

The district should be large enough so that some one specially trained in problems of supervision shall be in charge of the instructional program of the school.

### When, If Ever, Should Teachers Be Given Life Positions?

Should teachers be given life positions after only three years of trial?

Dr. Ellwood P. Cubberley, dean, school of education, Leland Stanford University, California, says "no" emphatically. In addressing delegates to the recent New England Conference of Secondary School Principals, Framingham, Mass., he pointed out the fallacies of such a policy: "We take on for life, outside of flagrant breaches of conduct or serious disability, teachers who might have been inspired to better themselves with study and travel during their experimental three years, and who later, feeling secure, lapse sometimes into indifferent teachers, hard and cruel to pupils."

As a remedy, Doctor Cubberley suggests giving teachers one-year contracts only for the first three years, then a four-year, then a seven-year contract. Even after the seven-year period they should not be guaranteed life positions, he said.

# The NATION'S SCHOOLS

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# Editorials

## For the Improvement of Rural Education

THIS issue of The NATION'S SCHOOLS sees the inauguration of a new department on rural school problems. This department will be devoted to a thoroughgoing diagnosis of the causes of backwardness in the rural schools, and especially will it encourage the discussion of ways and means of improving rural education.

The NATION'S SCHOOLS believes that the most important problem to-day in American life is the betterment of rural education for the purpose of equipping the rural child with the knowledge and skills that will place him on an equality with urban children. It has been shown time and again that the majority of young persons who are reared in rural sections do not live out their lives in their native localities. They migrate to all parts of the country and especially to the urban centers. The welfare of the entire country, then, requires that the rural child shall not be trained as though he is to be confined for all his days to his home neighborhood. In view of these well recognized facts, The NATION'S SCHOOLS, in establishing its department of rural education, is proceeding on the principle that the improvement of the rural schools will redound to the benefit of every group in American life.

Readers of this magazine do not need to be told that the director of the new department, Miss Heffernan, is admirably qualified, by special training and by experience, to guide the discussion of problems pertaining to the betterment of rural education. She knows what the problems are, for she has been working with them. She knows the difficulties from the inside. She is in touch with progressive movements in rural education throughout the country. In each issue of the magazine she will select from all the available material pertaining to progress in rural education that which is most helpful and best calculated to serve as inspiration and as practical guidance for those who are responsible for policies in rural schools.

Those who are familiar with the educational situation throughout the country know that rural schools, taken as a whole, have not been able to keep abreast of urban schools in educational development. Let anyone visit any section of the country and he will hear it said that the "little



red schoolhouse" is a laggard in American progress; that it is out of date and that the boys and girls whom it trains are not able to adjust themselves readily or adequately to social, political and industrial conditions in the world in which they must live.

While there is widespread recognition of the retardation of rural education, taken as a whole, there is at the same time a determination on the part alike of educators and of laymen to put the rural schools, if it can be done, on a par with progressive urban schools. Our citizens, irrespective of their profession, the locality in which they live or their economic status, are beginning to realize that the well-being of the nation depends in large measure upon the extent to which the rural population understands the principles underlying American institutions and can attain a standard of living comparable to that enjoyed by urban peoples. We do not want in our country to develop a peasant class to be exploited by favored groups.

### "And Now the Whining Schoolboy ... Creeping Unwillingly to School"

**O**NCE schoolboys whined when vacation was over and they crept like snails unwillingly back to school. But those days are gone forever in most communities. Ask one hundred pupils from the age of five to twenty years whether or not they hate to go to school and only a small percentage of them will answer in the affirmative. Most of them would rather go to school than stay at home or spend all of their time on the playground. In the congested sections of our cities, pupils have a better time in school than they have any place outside of it, taking the whole day, the whole week and the whole year through.

Everything about school is more congenial for children in America to-day than it was any place in the world when Shakespeare wrote that school boys whine when they go to school. Teachers and pupils are companionable. A pupil can have as good a time with his teacher—speaking generally but allowing for occasional exceptions—as he can with anyone else, and an increasing proportion of teachers make more enjoyable companions for pupils than do their own classmates. Chastisement of pupils in any way has completely disappeared from a large proportion of classrooms in our country. Teachers know how to present the material of education so that pupils do not have to be whipped or stood up in a corner with dunce's cap and bells or coerced in any other way to make

them attentive and diligent in gaining an education. Comparatively speaking, there is not a great deal of sitting still in hard and fast seats now and memorizing the contents of books. The pupil is up and doing and he is not bored or fatigued in school to such a degree as were pupils in earlier times.

Some cartoonists have not heard of the change that has taken place in respect to the attractiveness of school life. A cartoon was recently published that shows pupils rushing out of school for vacation with unrestrained hilarity. In the doorway stands an austere, begoggled female who is supervising the children until they reach the street, and some of them glance back at her with unconcealed derision. The man who drew that cartoon knows nothing about the relations of teachers and pupils to-day in American schools. He is perpetuating a tradition that has no basis in fact in nine hundred and ninety-nine out of every thousand schools chosen at random in our country to-day.

Some may think this is too idealistic a picture of the American school, but anything resembling the situation depicted in the cartoon just described is not noted by those of us who visit schools in different parts of the country. Rather do we note the opposite—children leaving the school for a long vacation with regret and testifying to their teacher that they are going to miss her and that they will be happy when they can be together again in September.

Wouldn't it help a lot if cartoonists, so far as school life is concerned, could be brought up-to-date so that they would picture children running gleefully back to school instead of crawling back, unwillingly and whiningly? It is certain that some patrons of the schools do not appreciate that the best friend of their children is their teacher.

### Policy Making in American Schools

**T**HE NATION'S SCHOOLS is read principally by those who are responsible for determining policies in the schools. Our readers do not need to be told that for two or three decades educational policies have been shifting rapidly throughout the country. Policies are still changing rapidly. Some educators are confused by the incessant changes in curricula, in methods of instruction and in administrative policies generally. Critics of present day education are saying that there are no guiding principles in our educational work; we are rushing here and there without chart or compass; we have no clear-cut objectives, and if we did have any definite aims we should not know how to attain them.



William McAndrew has played a prominent rôle in determining our educational policies during the past three decades. He has always been on the educational firing line. He has worked by the side of the men who have been leading in educational advance. In the midst of apparent confusion he has understood what underlying policies have been guiding our movements. He has been an outstanding figure in the educational arena during the period when present day educational policies have been forming.

In this issue of *The NATION'S SCHOOLS*, Mr. McAndrew begins a series of articles on policy making and policy makers in American education. He will tell readers informally about the men and women who have initiated or have promoted educational reforms of one kind or another. For a brief period he has been detached from policy making himself, so that he has had an opportunity to survey the movements that are in progress and to evaluate their importance. In his present situation he can be freer and franker in discussing leaders and values and tendencies than he could be if he were engaged in administering schools himself. He can make suggestions regarding a desirable course for policy makers to pursue which would be impossible if he were not free at the present moment from administrative responsibilities. We predict that those who are engaged in shaping educational policies will be interested, entertained and helped by William McAndrew's intimate comments on policies and policy makers in American education.



### Is the P. T. A. an Ally or an Enemy of Educational Organizations?

**T**HERE must be at this time six or seven times as many members of the National Congress of Parents and Teachers as there are members of the National Education Association. The growth of the parent-teacher movement has been phenomenal. Its potential power is well-nigh immeasurable. It has not yet capitalized on its potentialities but it is becoming conscious of its opportunities. It is a movement to be reckoned with by superintendents, principals and teachers and by every agency engaged in promoting social welfare.

For the volume sponsored by the National Congress of Parents and Teachers on the views of superintendents and principals concerning the usefulness of parent-teacher associations, a large number of superintendents and principals throughout the country, recently were asked what they thought were the strong and weak points of the

P. T. A. The testimonies were overwhelmingly commendable and complimentary. There were, however, some skeptics and a few enemies of the P. T. A. among the correspondents. Those hostile to parent-teacher activities said that parents are meddlers who take advantage of any opportunity to throw a wrench into the educational machinery. A group of superintendents objected to the P. T. A. meetings because they were "fruitless and merely consumed the time and energy of teachers who were expected to attend them." The superintendents and principals who praised the P. T. A. declared that it was or could be made an ally of the educational organization.

Sometimes P. T. A. meetings are without profit because the programs are conventional, hortative and platitudinous. The discussions are not directed at definite, specific problems. When programs are left to parents to prepare, the chances are that they will not as a rule be helpful.

In an investigation conducted for the National Congress of Parents and Teachers, superintendents and principals were asked whether they customarily used the meetings of parent-teacher associations to consider matters of policy regarding the extension or modification of educational work in the community or the improvement of the health of school children. Every correspondent, without exception, who approved the P. T. A. as an instrument for the enlightenment of citizens regarding the work and the needs of the schools, played the leading rôle in arranging the programs.

In ninety-nine cases out of a hundred, superintendents and principals who have needed the assistance of citizens in the extension and betterment of educational facilities in their respective communities have been able to lead citizens to appreciate the importance of the improvements they have wished to make. On the other hand, superintendents and principals who do not take the lead but let patrons of the schools prepare programs for P. T. A. meetings, are taking a chance that more or less irrelevant and purely personal problems will be discussed.

Some superintendents claimed that "parents do more harm than good when they meddle in school affairs." When parents air their individual grievances at meetings of a parent-teacher association, they are quite likely to give rise to doubts and discontent and irrational and unjustifiable criticism of educational work. At the same time, frank expression is one means of curing parental disaffection. A superintendent or principal should be Freudian psychologist enough to appreciate that repressed doubt or anger may develop into a complex that may be a continuous source of disturbance and difficult to remedy.

## *Practical School Administration:* How Much Clerical Assistance Shall the Board Provide?

BY PHILIP LOVEJOY, ASSISTANT SUPERINTENDENT OF SCHOOLS, HAMTRAMCK, MICH.

**A**N AUTOMOBILE accident recently deprived me of two clerks who were the mainstay of my office. One had been chief clerk in charge of purchasing for more than five years; the other was the unit cost girl. Normally the office had a personnel of four girls. The third had been ordered to Pennsylvania for a summer's rest. As a result, there remained only one girl who knew anything at all about the office procedure and she was about to be transferred to an adjoining office.

Thus in the late days of August I was faced

with the problem of reorganizing the entire office procedure and of finding new girls to fill the vacancies.

All of which brings up the general subject of clerks. How many shall there be? Where shall they be obtained? What shall their training be? How much shall they be paid? What hours shall they work?

It seems that the first step should be to make a job analysis of the work. Recently I contemplated a reorganization in the placement department.

[illegible]

Feeling that there was more personnel involved on that particular task than was necessary, I took a time analysis of what was being done. This is a complementary step to the job analysis.

Taking a time analysis is a simple task. A sheet is ruled much as is shown in the accompanying diagram. Each five minutes during a day the employee gives a statement of what she has done. This may be done for a week to get a general average. Five-minute intervals are used so that not too much time will be overlooked. This analysis is a nuisance but it is the only way to find out exactly what is being done. A careful study of this sheet at the end of a week will reveal the main items of activity as well as the possible loopholes of waste.

#### *Why the Analyses Are Helpful*

The other thing maintained was a job analysis. The executive must lay out the general plan of operation of the office. He must determine the need; the objective of the division; the general tasks to be performed; the extraneous activities to be eliminated. Coupling this with the time analysis, he may then reach a conclusion as to what will be needed to carry on the work efficiently.

If the time and job analyses show that four girl clerks will be necessary, their tasks may be allotted as follows: A acts as chief clerk in office, caring for all purchases, checking bids and auditing invoices; B serves as information clerk at the entrance, handling also pay rolls, public relations, correspondence and filing; C is the unit cost clerk, taking care of all requisitions, posting all purchases on unit cost cards and handling all the running inventories; D is the general typist and helper to C.

Since all the girls in the office were to be new, it was possible to try them out to see which one had particular propensities for special assignments. This is exactly what was done and at the end of six months definite assignments were made.

#### *How the Force Was Chosen*

The rule of the Hamtramck Board of Education, Hamtramck, Mich., is that all girls who are employed as clerks in the public schools must be single, residents of the community and graduates of the local high school. The initial step was to go to the office practice course of the commercial department and choose the best girls on the list. The particular qualifications demanded at this special time were that the girls should have as much commercial training as possible. More than that, however, it was necessary that they should be intelligent. The salutatorian of the class was chosen and three other girls all of whom were in

the upper third of the senior group. One was especially good in English. One girl was Polish, two were Russian and the fourth was Irish. It was discovered that the chief asset of all of these girls was their ability to think. After a problem had been explained once they were able to apply its lessons practically.

The girls were hired on the probationary tenure, which means that they were to receive \$60 a month while they were on trial. No written examinations were held. Since the supply practically equals the demand, few eliminations are possible. Many school systems, however, have found written examinations desirable. Detroit, for instance, gives all applicants thirty days' notice of an examination in which 50 per cent of the rating is given to experience, general intelligence, health, character and personality, all equally weighted, while the other 50 per cent is based on the written examination or technical qualifications.

In Hamtramck, the board of education has adopted a simple salary schedule as follows:

Year .....	1	2	3	4
Clerk .....	\$ 70	\$ 80	\$ 90	\$ 90
Stenographer .....	100	110	120	120
Chief clerk .....	120	130	140	140

The Hamtramck Public School Code sets forth the salary schedule and also defines the classification of clerks as follows:

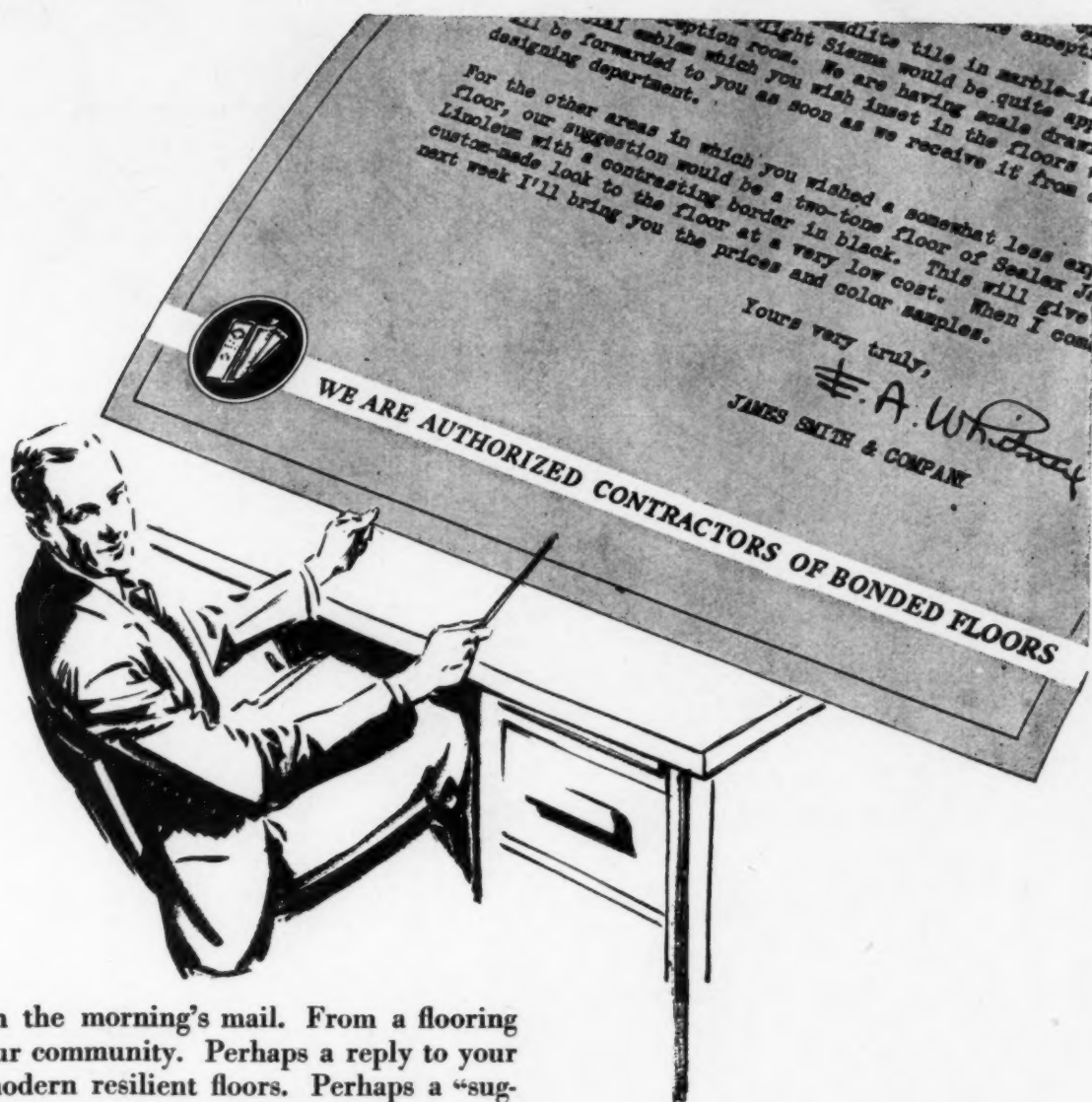
#### *Classification of Clerks*

"Clerical service of various types must be carefully organized in public education so that the machinery of administration may operate efficiently in the best interests of the children. While some of the activities duplicate those in private venture, there are other special qualifications peculiar to public education required. To secure these qualifications, it is necessary to pay somewhat higher rewards than the average paid in private activity.

"General: All applicants for clerical positions in the public schools must: (1) pass a satisfactory physical examination to be given by the medical director of the schools; (2) pass a satisfactory mental test, to be given by the director of the psychological clinic; (3) be neat in person; (4) be pleasing and sympathetic in personality; (5) be able to meet the public and teachers successfully; (6) possess at least the equivalent of a high school education; (7) possess a good character and (8) satisfy the technical requirements of the position.

"Chief Clerk: A chief clerk is one in charge of a recognized division and shall have under her control at least three other individuals. The work shall consist of the laying out and directing of the work of subordinates and executive re-





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Rank	Duties	Total Performing Each Duty	Number of General Clerks Performing Each Daily	Number of Special Clerks Performing Each Daily as Major Work	Number of Special Clerks Performing Each Daily as Minor Work
1	Telephoning .....	1,276	566	00	710
2	Filing and indexing.....	1,007	349	451	207
3	Typing from copy.....	850	155	515	180
4	Adding and listing machine operating...	815	435	63	317
5	Posting original entries.....	732	526	52	154
6	Calculating machine operating.....	713	246	249	218
7	Checking and verification.....	595	413	00	182
8	Writing or dictating letters.....	564	279	75	210
9	Checking postings .....	538	424	00	114
10	Cost figuring .....	392	168	136	88
11	Writing orders .....	395	162	127	106
12	Information desk work.....	344	181	00	163
13	Writing monthly statements.....	309	205	00	104
14	Keeping stock records.....	303	132	79	92
15	Figuring discounts .....	297	134	00	163
16	Handling mail .....	285	97	130	58
17	Pay roll clerk work.....	245	46	134	65
18	Receiving clerk work.....	242	100	64	78
19	Recording orders .....	212	128	00	84
20	Timekeeping .....	189	74	51	64
21	Keeping shipping records.....	184	82	46	56
22	Credit clerk work.....	168	95	28	45
23	Cashier work .....	167	77	45	45
24	Price marking .....	165	70	34	61
25	Messenger work .....	147	78	00	69
26	Collection clerk work.....	129	71	00	58
27	Inventory work .....	120	60	00	60
28	Dictaphone machine operating.....	120	2	114	4
29	Bookkeeping machine operating.....	118	58	46	14
30	Billing machine operating.....	111	22	65	24
31	Tracing production order.....	111	52	00	59
32	Addressograph operating .....	96	12	72	12
33	Hollerith work .....	86	15	53	18
34	Writing shipping papers.....	86	35	00	51
35	Statistical work .....	74	10	64	00
36	Typing bills .....	67	50	00	17
37	Routing shipments .....	63	24	00	39
38	Correspondence work .....	52	00	52	00
39	Multigraph operating .....	50	8	37	5
40	Blue print duplicating.....	36	24	00	12
41	Mimeograph operating .....	36	13	7	16
42	Show card lettering.....	30	8	00	22
43	Marking shipments (brush).....	9	7	00	2
44	Stenciling .....	8	8	00	00
45	Sealing machine operating.....	7	7	00	00
46	Photostat duplicating .....	7	7	00	00
47	Checking claims .....	4	4	00	00
48	Miscellaneous .....	26	26	00	00
Totals .....		12,580	5,745	2,789	4,046

sponsibility for a certain type of school activity.

"The qualifications of a chief clerk shall be graduation from high school, supplemented by special training in the clerical activity; elementary knowledge of statistical procedure; ability to use mechanical devices in statistical method; at least five years of successful experience in other clerical positions; a working knowledge of typewriting, and ability to manage and direct others in the performance of their duties.

"Stenographer: The duties of stenographer include those generally associated with this activity. The qualifying applicant must be a high school graduate and in addition must have had three years of successful experience.

"Clerk: The duties shall be those ordinarily associated with this position and shall include filing, typing and the keeping of simple records. The qualifications shall be graduation from high school plus general training in clerical work."

A recent bulletin from the office of the superintendent of schools stated that:

"Ten dollars a month is the maximum increase that any person doing clerical or stenographic work of any nature may receive in any one year.

"In elementary schools where there is one clerk each and in which such clerks do stenographic work, the status of such clerks shall be that of stenographers.

"A chief clerk cannot receive more than the

Corridor of St. Catherine's College and Academy, showing a waxed linoleum floor that is assured a "double life" by the Johnson method of floor preservation.



TODAY

■ you can begin to double the life of

## YOUR FLOORS



Chapel of St. Catherine's College and Academy, St. Paul, Minnesota. Wood, tile, linoleum and composition floors in the many buildings of this institution are protected and beautified by the Johnson method.

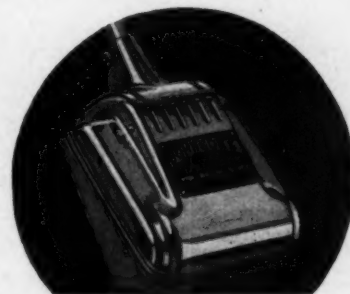
How will *your* flooring look five years from now? Scrubbed to death, shabby, needing costly replacement? Or still strong, resilient, lustrous as the floor above?

Perhaps unconsciously you have imagined that your floors would be "good" for the life of the building. But a moment's consideration shows that no other part of the building receives as hard wear. No other part deteriorates as fast, and mopping and scrubbing both contribute to hasten this end.

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cost is for the wax you use.

For over 45 years S. C. Johnson & Son have been supplying genuine "Johnson's Floor Wax" together with counsel on all types of floor maintenance problems to distinguished schools, hospitals, institutions. A Johnson engineer will be glad to analyze your situation and submit a report without obligation.



■ This machine supplied free with your order for Johnson's Wax.

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minimum, which is \$140 a month, unless that person is trained in statistics.

"All other clerks will receive a maximum of \$90 a month unless such clerks are required to devote a major portion of their time to stenographic work or are doing statistical work that requires special training. In such cases the maximum cannot be higher than \$120 a month.

"Any person doing clerical work may be placed on probation and will receive no increase whatsoever if for any reason that person's work is not satisfactory. If, at the end of the probationary period, improvement does not justify an increase, then the services of the person shall be discontinued."

#### *Detroit Adopts Salary Schedule*

The Detroit public schools in Article 23 of the by-laws adopted November 20, 1928, approving the system of qualifications, classifications and salary schedule of clerical employees, set forth the following salary schedule:

Title	Monthly Schedule	Monthly Increase
Junior clerk .....	\$ 90-125	10
Senior clerk .....	135-150	10
Statistical machine operator...	135-150	10
Junior typist .....	95-130	10
Senior typist .....	140-165	10
Junior stenographer .....	100-140	10
Senior stenographer .....	150-175	10
Secretarial stenographer .....	185-220	10
Secretarial stenographer and cashier .....	195-240	10
Principal stenographer .....	230-250	10
Principal clerk.....	230-250	10
Junior bookkeeper .....	110-140	10
Senior bookkeeper .....	150-185	10
Junior accountant .....	195-240	10
Senior accountant .....	250-290	10
Assistant .....	160-200	10
Stores clerk .....	130-160	10
Receiving and shipping clerk ..	170-200	10
Buyer .....	170-200	10
Storekeeper .....	210-250	10

The Hamtramck Public School Code specifically sets forth the tenure of the clerical employees as follows:

"Clerical tenure, in general, shall be continuous during the period of efficient service. The agreement under which an applicant takes a clerical position shall be separation, within a period of two weeks, after written notice of inefficiency.

"After one year of service a clerical employee shall be entitled to two weeks of vacation with full pay. The full vacation must be taken within the year. It is not cumulative.

"In case of illness, after two years of service, a clerical employee may apply the vacation period against such illness."

There has since been added a paragraph stating that no clerk will be employed after marriage.

An office appliance and office practice class is maintained. This is taught by a regular commercial teacher. Pupils elect this class in their senior year after they have had the basic training in commercial activities. It is assumed that no pupil will have become a senior in the commercial course who does not have possibilities of success. The course is organized for the specific purpose of giving practical training in the various routines to which a girl might be subjected after graduation.

To aid in this work, the girls are assigned to the various offices within the school system. Here they work under the direction of the chief clerk of the office. Periodical appraisals are made by these offices to the teacher and discussions are held in order to go over the difficulties that arise. It has become essential for each girl to report to her teacher what she had been doing and to mention the difficulties she experienced. At the end of the month, the chief clerk reports to the teacher what the pupil clerk did and how proficient she was. The two lists are then tallied and further discussion held.

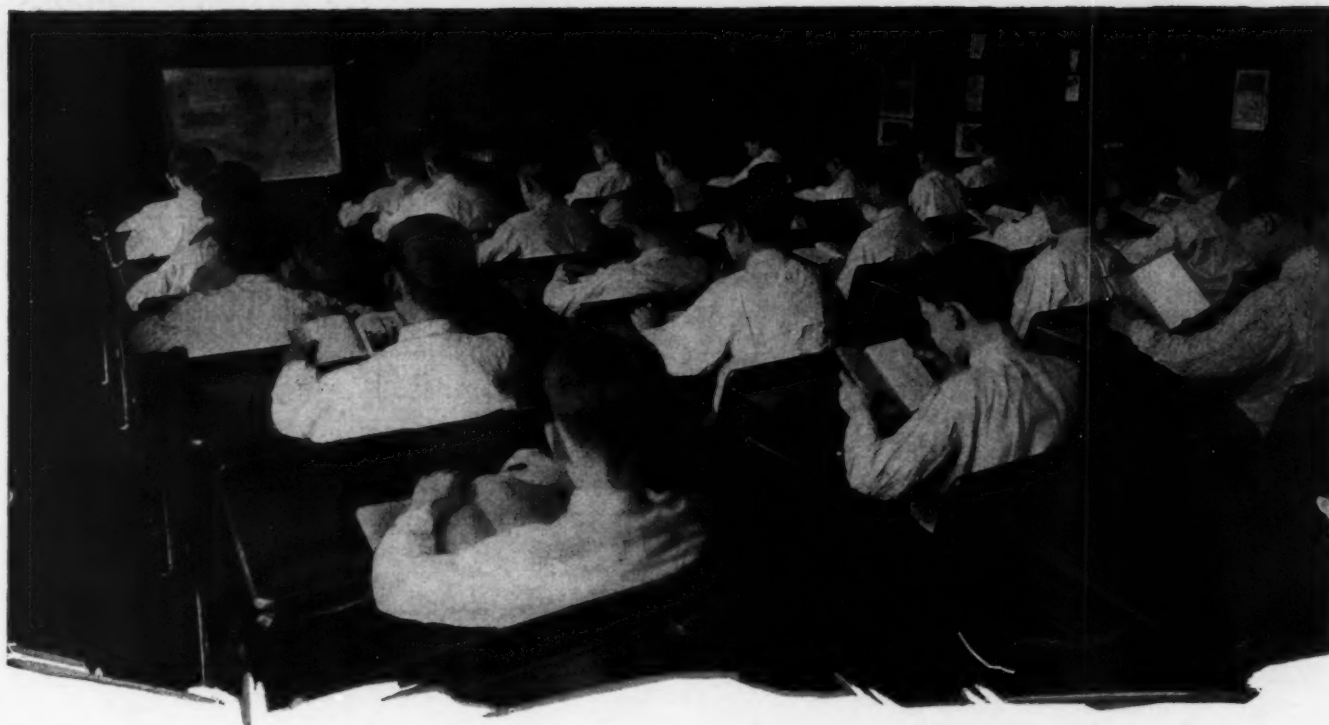
#### *Giving the Girls Practical Experience*

Speakers from various offices are asked to talk to the girls about the numerous problems that may arise either in or out of school. In this way, practical experience is obtained. Likewise, it has become possible for the offices to reduce their expense for clerical service.

Some time ago an excellent book appeared from the Harvard University Press under the title of "New Conception of Office Practice" by Nichols. In this interesting report we read: "Of 34,513 office employees reported by thirty-seven firms, 3,451 or 10 per cent are stenographers and 656 or 1.9 per cent are bookkeepers; thus it is seen that 12 per cent of office workers in these thirty-seven firms are doing work, for the doing of which 80 per cent of the high school business training is given."

#### *The Necessity of a Job Analysis*

To ascertain what the clerks are to do a job analysis is necessary. If the girls are to be trained for jobs other than those in the board of education offices a citywide analysis is necessary. Nichols reports the training demanded by thirty-six office managers. Duties for which training should be given in school were listed by 50 per cent or more of the managers as follows: figuring costs; discount figuring; typing from copy; typing bills; dictaphone machine operating; address



## PeerVent Service is Valuable

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operating; billing machine operating; multigraph operating; mimeograph operating; adding or listing machine operating; writing or dictating letters; stock record work; posting original entries; checking postings; pay roll and timekeeping work; monthly statement work and auditing vouchers. Those included by 30 to 50 per cent of the managers were: card index work; cashier's duties; collection work; inventory work; photostat operating; blue print duplicating; operating sealing machine; using telephone; shipping clerk work; order clerk work and credit clerk work.

It seems that clerks need skill in one line and reasonable competency in several others. They must all use longhand. The types of English needed will vary with the work. It is absolutely essential that the girls have good vision, good hearing, physical strength and executive ability. In other words, they must have brains and be able to use them.

#### *Is the Commercial Course Adequate?*

Before proceeding further, let us quote one more table presented in the "New Conception of Office Practice." It gives a general summation of the duties of 12,580 clerks. Each executive requiring girls would do well to study this table. Each school executive or director of instruction planning courses of study should give the table the closest scrutiny. If we take the first five duties, for instance and check back over the course of study offered in the average high school, do we find proper and sufficient training being given for these duties?

Let us return from our brief digression to a further study of the training of the girls for general clerical work in the offices of the board of education.

Periodic conferences are held with the girls after they have been employed. In these conferences, they have the opportunity to bring up anything that they feel will be for the betterment of the system. In any case where they feel that they can improve their own work they are asked to make the recommendation. If additional equipment is needed to lighten their tasks they are asked to suggest it. If various procedures are in question they are asked to give their analysis of the proposed change.

Likewise, the difficulties of the girls in general are discussed. The girls are given special training in answering the telephone. When it is discovered that their enunciation is poor, they are asked to check with the director of the telephone company's training school. The chief clerk in my office took several lessons in how to speak correctly over the phone and then gave this infor-

mation to the other clerks. The result is that the phone service from our office has improved more than a hundred per cent. If a girl answers the phone before eleven o'clock in the morning, she says, "Good morning, Hamtramck board of education." A large number of favorable reactions have been received at this politeness on the part of the girls. In answering the house phone, if it is in the morning, the girl again says, "Good morning" and then gives her name, as "Good morning, Isabelle speaking." This politeness has extended to other offices in the system, and the idea of telling who is answering the phone saves a great deal of time.

#### *Friendly Attitude Is Sought*

The question of walking on heels or on the ball of the foot has been discussed. Many of the girls have never received lessons in posture. It is to their benefit to have such matters discussed. Less noise also improves the office.

Constantly questions of short cuts in doing things are brought up for discussion, and demonstrations are given to promote the efficiency of the girls. During these demonstrations, girls from the office practice classes are often present. In this way they receive first-hand information regarding various ways in which the matter might be handled.

Any printed matter that will tend to develop the esprit de corps of the group is given to the girls. Special books on office procedures are suggested and frequently the girls are asked to prepare articles for the house organ. These are within their special fields of interest and are always signed on publication.

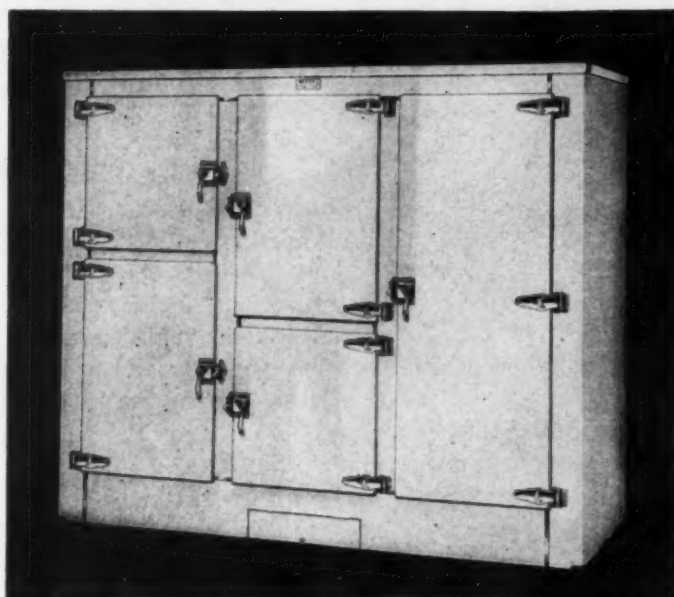
#### *Improving the Morale of the Workers*

Every effort has been made to develop on the part of the girls a loyalty to their tasks. They have been asked to arrive not later than eight o'clock in the morning. They have been told that they might go in the afternoon when they felt their task for the day had been completed. Sometimes this may be three o'clock, but more often it is five or five-thirty. Time off to go to the doctor or dentist is always cheerfully granted and the girls do not feel that they are asking any great favor when they ask to go. Efforts have been made to have annual dinners for the staff. This has served to increase morale.

In other words, the thing that I am trying to say about specific training is that little attention is paid to it directly after graduation. It is all cultivated in the office practice classes and then when the girl accepts the job a spirit of loyalty is developed so that self-education, self-control and self-appraisal ensue.



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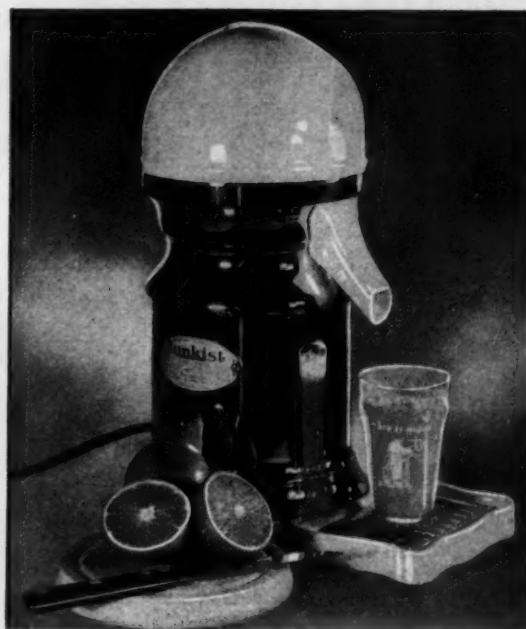
Typical of the new McCray models developed to meet modern needs in refrigeration . . . embodying the skill and experience developed in 40 years' manufacturing . . . the model P332 has porcelain interior and exterior with pure corkboard insulation . . . may be used with machine refrigeration of any type, or ice. Send for new catalogs showing complete line . . . no obligation.

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## *Your Everyday Problems\*:* Planning the School Publicity Program for the Year

By JOHN GUY FOWLKES, PROFESSOR OF EDUCATION, UNIVERSITY OF WISCONSIN

WITH the opening of the school year, the program of publicity for the schools will assume its customary place of great importance. Due to the high degree of interest in football, there is a possibility, if indeed not a probability, that athletic news will crowd other school news out of the local press. Inasmuch as one of the chief functions of school publicity is that of educating the public with respect to all branches of the school system, care should be taken not to give too much emphasis to any single activity.

The following calendar is presented as a basis for a publicity program for the entire school throughout the year. This calendar is the result of an analysis of 25,232 articles from 4,727 issues of daily and weekly Wisconsin newspapers that appeared during the school year, 1929-30.<sup>1</sup>

*September:* opening of schools; complete list of teachers including new teachers and courses they will teach; enrollment statistics covering at least a five-year period; list of former graduates who will attend college; list of last year's graduates and the positions they hold; new administrative policies; school calendar; building improvements made during the summer; educational guidance; articles on school objectives, aims, purposes, ideals and a summary of the seven cardinal objectives; new courses offered or changes made in the curriculum; new equipment and its uses; summer schools attended and trips made by teachers; how teachers spent their vacations; extracts from a handbook for pupils; extracts from a handbook for teachers; extracts from a handbook for parents; new books purchased for the library; health recommendations of the superintendent or school physician; a letter from the superintendent or head of the school to the patrons or a résumé of a talk given by some school official over the radio on the evening be-

fore school opens; names of tuition pupils attending high school; results of physical examinations and a comparison with conditions of previous years; methods of classification or ways of providing for individual differences; a series of articles on who teaches your child giving a short sketch of each teacher and in the grades the names of the pupils; parent-teacher associations, their organization and plans; entertainment of new teachers; explanation of compulsory attendance laws; reports of faculty meetings; extra-curricular activities news; election of class officers; election of school organization officers; election of cheer leaders; football schedule; football activities; other athletic activities; purposes of school organizations and their plans for the year; student publications; student council, its organization and duties; pep meetings; band and orchestra news.

### *Fall Publicity Is Varied*

*October:* how the school accommodates the increasing number of pupils; how the school has adjusted itself to the community; progress of new departments; opening of continuation schools; opening of evening schools; opening of vocational schools; offerings of continuation, evening and vocational schools; Americanization programs for Columbus Day, October 12; school playgrounds; school budget; articles on adult and parent education; honor roll for the first six weeks; attendance report for the first six weeks; thrift campaigns, school savings; needs of the school at the November elections; minutes of the meetings of the board of education; recent additions to the library; junior traffic officers and their duties; reports of open meetings at which teachers explain their work; doings of parent-teacher and band mother clubs; extra-curricular news; football games; standing of football teams; other athletic activities; intramural programs; school social affairs; school fairs; work of school clubs and organizations.

*November:* continuation of articles on elections which affect school needs; additional budget information; articles on the work of the continuation, vocational and evening schools; voca-

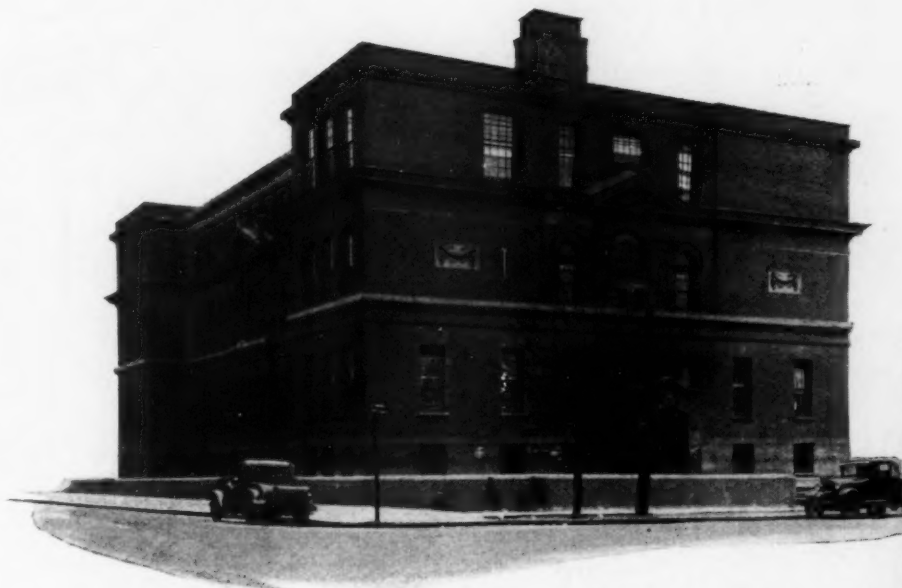
\* Discussions in this department deal with problems that confront principals and superintendents. Inquiries on problems of this nature should be addressed to Doctor Fowlkes.

<sup>1</sup> The school calendar presented is taken from a handbook on school publicity by John Guy Fowlkes and E. G. Wipperman, superintendent of schools, Sheboygan Falls, Wis., which will appear at an early date. The following works were consulted in preparing the calendar: *Publicity Campaigns for Better School Support*, C. Alexander and W. W. Theisen, World Book Co., New York, 1921; *What to Tell the People About the Public Schools*, B. M. Farley, Bureau of Publications, Teachers College, Columbia University, 1929; *Newspaper Publicity*, R. G. Reynolds, A. G. Seiler, New York, 1922.

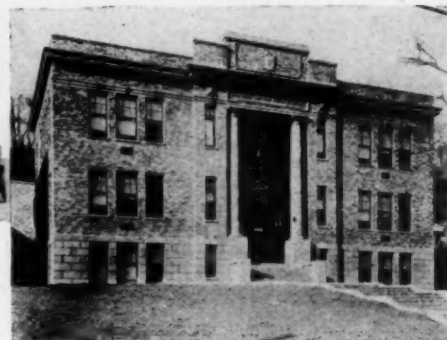
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tional guidance; health suggestions by school nurse; bond issues and tax levies; minutes of board of education meetings; parent-teacher meetings; local teacher meetings; school finance; sources of taxation for school purposes; what the state spends for education; articles showing needs for modern school equipment; state teacher association meetings; sectional teacher association meetings; better English week; reports on "open house" during American Education Week; American Education Week in the school and churches; synopsis of speeches by people of the community in the schools, churches and over the radio during American Education Week; illiteracy; extra-curricular news; football news; standing of football team; summary of football season; basket ball schedule; other athletic news; Thanksgiving programs; progress of band and orchestra; social functions; election of new board members.

*December:* honor roll for the second six weeks; attendance reports for second six weeks; nursery schools and kindergartens; health articles—work of the Red Cross, Junior Red Cross and the Anti-Tuberculosis Association; Christmas Seal sale campaigns; outstanding educational contributions; short educational book reviews; Christmas vacation; parent-teacher association news; local teacher association news; minutes of board of education; extra-curricular news; opening of basket ball season; standing of basket ball teams; intramural program; Christmas programs; reports of radio concerts given by musical organizations of the school; articles on such activities as debate, dramatics, and athletic associations.

#### *Mid-Year Commencement Arouses Interest*

*January:* reopening of school after Christmas holidays; list of mid-year graduates; summary of class and subject accomplishments during the first semester; semester and third six-week period honor rolls; semester and third six-week period attendance records; changes in courses for second semester; changes in faculty for second semester; mid-year commencement; class play; articles on method by outstanding teachers; character education; local teacher meetings; parent-teacher meetings; minutes of board of education meetings; talks by local teachers before community clubs; functions the school performs and the facilities necessary to perform properly these functions; extra-curricular activities; basket ball games; basket ball team standing; volley ball teams; intramural program; other athletic activities; social functions given during the month.

*February:* beginning of the second semester; reports on the Department of Superintendence

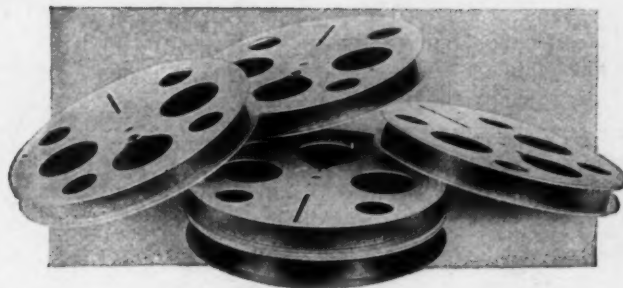
N. E. A. meeting; work of the dental clinic; medical inspection in the schools; education on parenthood; mental hygiene; enrollment for second semester; results of first semester work in continuation, vocational and evening schools; Washington and Lincoln patriotic programs in the schools; extra-curricular activities; basket ball games; standing of basket ball teams; intramural program; band and orchestra news; social functions of school organizations; class and organization officers for second semester; local teacher meetings; minutes of the board of education; parent-teacher association meetings; work of the student council.

#### *Publicity Decreases in Spring*

*March:* honor roll for first six weeks of semester; attendance reports for first six weeks of second semester; school garden clubs organized; what our American schools represent in American life; inside workings of a school; a series of articles playing up the work of the various departments of the school; building and sites program of the board of education; the physical plant; articles by teachers on extra-curricular activities of the school; election of school officers; minutes of the meetings of the board of education; local teacher organizations; parent-teacher organizations; extra-curricular news; basket ball games; standing of teams; district and state basket ball tournaments; intramural program; oratorical and declamatory contests; operetta by the musical department.

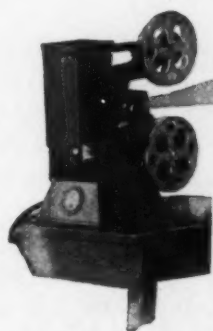
*April:* election of new board members; new officers of the board of education; assembly programs; prominent visitors and their speeches; vocational guidance for high school pupils; how the school cares for behavior problem children; results of tests and pupil achievement; modern methods of measuring in education; reports on research problems of the faculty; articles on the school exhibit; minutes of the board of education meetings; parent-teacher associations; local teacher association meeting; reports on field trips through manufacturing plants; extra-curricular news; track teams; baseball teams; other athletics; intramural programs; school essay contests; Spring vacation.

*May:* honor roll based on second six weeks' period; attendance reports on second six weeks' period; legislation affecting the schools; Child Health Day; national music week; safety education; reports on students at colleges; curriculum suggestions for next year; some phase of school expenditure; course of study from which pupils may plan their work for the coming year; minutes of the board of education meetings; local

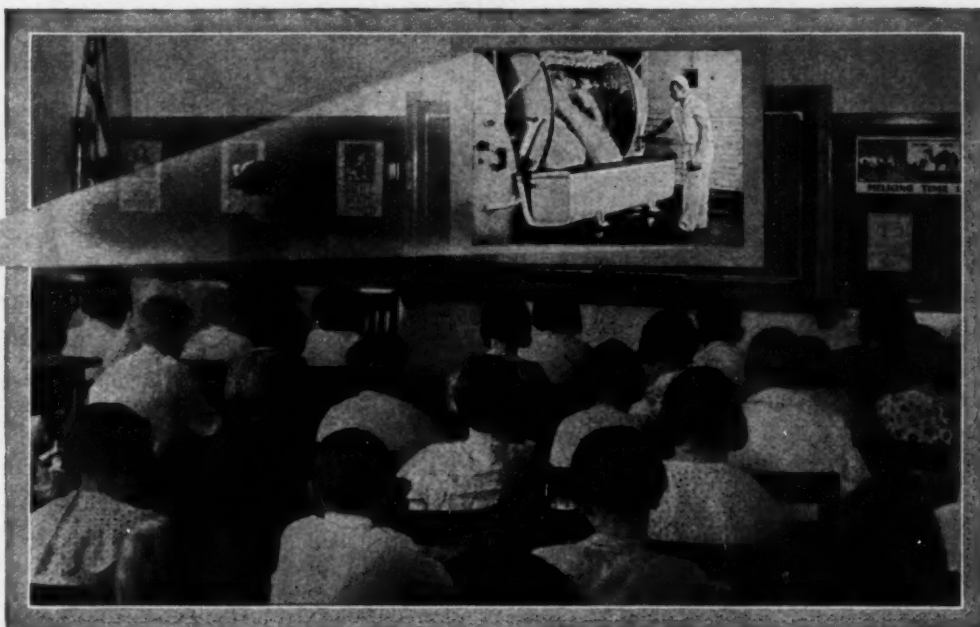


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teacher associations; parent-teacher associations; extra-curricular activity news; demonstrations by the physical education department; open air pageants conducted by the physical education department; field and track meets; baseball; other athletics; May festivals; class play; Arbor and Bird Day activity; band tournaments; music contests; participation in Memorial Day services.

*June:* list of teachers appointed for next year; list of graduates; value of college education; alumni activities; commencement program; baccalaureate sermon; Flag Day; calendar for next year; honor roll for the last period; attendance reports for the last period; honor students; scholarship awards; pupil achievement; vacation schools; supervised playgrounds; teachers in summer schools; minutes of the board of education meetings; parent-teacher association activity; review of various events during the school year.

*July:* minutes of the board of education meetings; professional studies of teachers in summer schools; purchase of new sites; building projects; list of teachers in vacation school; offerings of vacation schools; annual meetings; election of school officers; new school officers; annual reports of the superintendent or the board of education; summaries of enrollment and attendance with comparisons covering a five-year period; financial statistics; annual district reports; annual high school reports; summer session of the N. E. A.; where the June graduates are employed.

*August:* census information; cost of school per pupil and distribution of costs; playground activities; work of the vacation schools; progress of building improvements; teachers meetings and institutes; new ideas and plans for the coming year; time schedule for daily sessions; schedule for high school classes; notice of opening of schools.

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## How One City Saved \$265,000 on Its School Building Program

A plan that has resulted in the saving of \$265,000 in the school building program of Boston during a six months' period has recently been reported. The old custom of requiring specialized products to be used in the construction of school buildings has been abandoned. In the specifications of the contracts, the building commission has now demanded that standard materials be used, thus opening up the Boston school work to the largest number of bidders, instead of to the favored few of other years who had the sole rights to the use of special materials.

The money saved will be used to construct additional schools in districts of the city where the demands for better facilities are pressing. As a result, more seats will be provided this year than was anticipated in the original building program.

## Where Mental Hygiene Theory Is Carried Into Practice

The following quotation from the *Public Schools Bulletin* of Evansville, Ind., shows mental hygiene carrying over from theory into practice:

"In the public schools of Evansville mental hygiene for all will be stressed during the next school session of 1930-31. Plans for featuring this new subject have not yet been formulated, but it may enter the success grade system for teachers, under Point 6, because that point specifically includes 'Personality.' The new phase of the mental hygienists, 'a successfully integrated personality,' will soon become better understood.

"It is requested that all 100 per cent teachers should read and study Chapter XX on 'The Principles of Mental Hygiene,' in 'The Normal Mind,' by Burnham, as soon as possible. This chapter will be taken up in all schools next year for study and practice. Of course, there could be no objection to the reading of the chapter by any teacher, but the reason for requesting only all 100 per cent teachers to read and study it is because they have already received the final stamp of professional approval, and any beginning in this recent development in the field of education will begin with them.

"This, however, should cause no alarm. Nothing unreasonable will be attempted. There is nothing which teachers should worry about in this connection. Anyway, worry is not good mental hygiene practice."

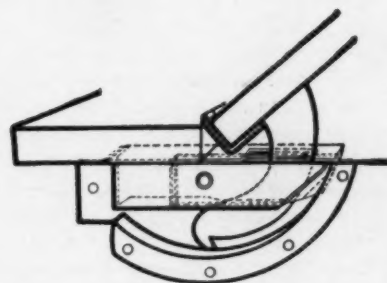




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## News of the Month

### Health Problems Uppermost at Pan-American Child Congress

The Pan-American Child Congress recently concluded at Lima, Peru, dealt chiefly with health problems, Bess Goodykoontz, assistant commissioner of education, announces in a communication just received by Commissioner William John Cooper.

Physiology is described as an "exceedingly popular" course in South America, but the equipment of the schools visited is meager and the instruction formal.

Miss Goodykoontz states that visits to hospitals, social service organizations, open air schools, and other public institutions disclose new developments, such as the introduction of vocational training.

A comparison of United States textbooks with those of the southern continent, she said, shows an advantage by the United States in attractiveness.

Miss Goodykoontz was appointed by President Hoover to represent the Office of Education at the congress. The congress was held to bring about an interchange of knowledge relative to child education, health and general welfare.

### Township School in Chicago Heights to Cost \$1,000,000

Work is to start shortly on the new \$1,000,000 Bloom Township High School, Chicago Heights, Ill. Completion of the building is scheduled for December 1, 1931.

The building will stand on a thirteen-acre site opposite the high school athletic field which contains eleven acres. The new structure will be U-shaped, with the center section comprising the academic unit. The east wing will house a 1,500-seat auditorium with complete theater equipment, while the west wing will contain a gymnasium, with a seating capacity of 2,500. The academic section will provide for 1,500 pupils. The two wings will be two and three stories high, while the academic unit will rise three stories with a six-story tower in the center.

Construction will be of reenforced concrete with the exterior treatment of pressed brick.

### South Africa Establishes a Bureau of Education

A bureau of education recently established in connection with the Union department of education of the Union of South Africa will follow to some extent the organization and work of the United States Office of Education and similar agencies of the British and German governments, according to a statement issued by the Office of Education. The statement summarizes an official announcement received by the commissioner of education, from the newly established bureau.

The function of the new bureau will be the collection, evaluation, and dissemination of "information concerning educational needs and actual progress in various directions (surveys)." It plans to deal with "educational questions on broad lines from a South African point of view, making available the experience gained in other countries."

### St. Louis Honors Civic Worker in New School

St. Louis is to have a new school which is to be named in honor of the late John H. Gundlach, civic worker.

The school, which will provide for 1,200 pupils, will cost \$350,039. It will contain sixteen classrooms, a kindergarten, two playroom-gymnasiums and other facilities.

### Citizens of Arlington, Mass., Vote \$277,000 for New School

Citizens of Arlington, Mass., have voted to appropriate \$277,000 for a high school to relieve crowded conditions in the Arlington schools. The selectmen will decide whether the funds shall be used to erect a separate building or to make an addition to the present high school.

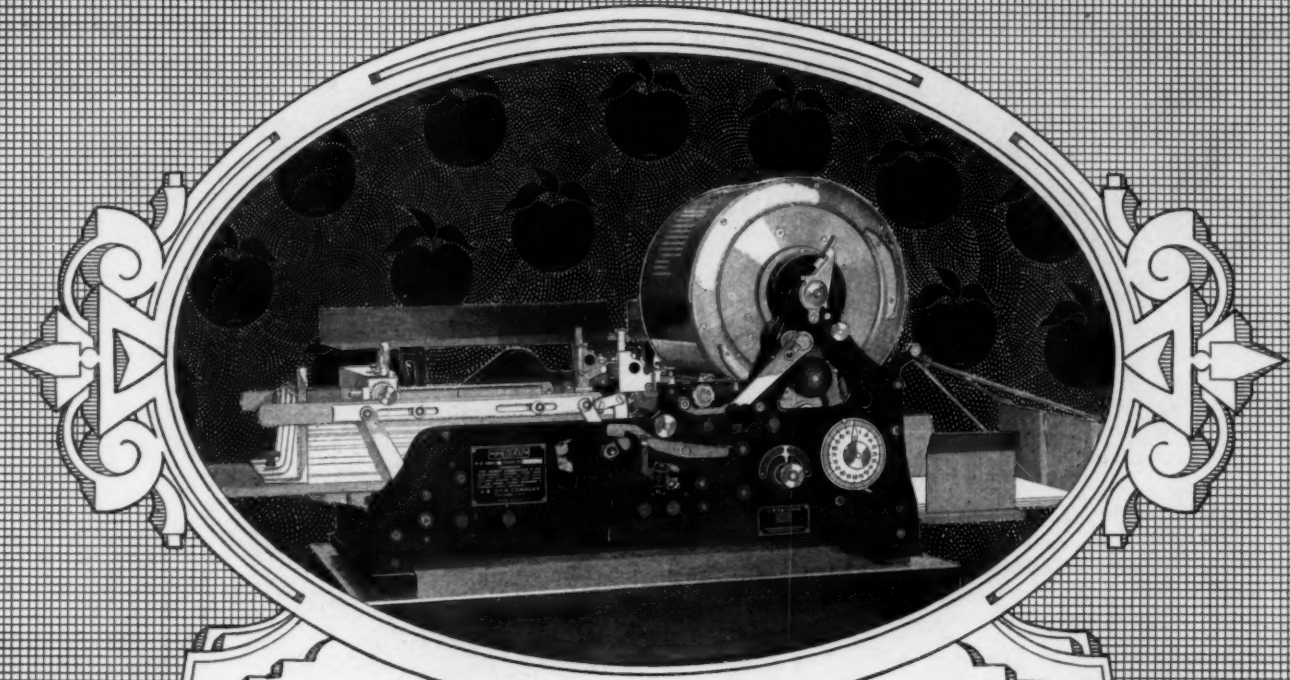
The use of special convertible desks during the last two years has relieved the congestion to a great extent and the school has been able to care for an enrollment of 1,200 pupils in a building that was designed to care for 850. The increasing enrollment, however, has made the erection of larger quarters expedient.

### Appropriation of \$3,750,000 Approved for Brooklyn School

The board of estimate, New York City, has approved an appropriation of \$3,750,000 for a new technical high school in Brooklyn, N. Y., despite the warning of Controller Charles W. Berry that New York is crowding its constitutional debt limit and that the board should be slow in passing appropriations.

The original request for the Brooklyn Technical High School was for \$5,500,000, but objections raised by the mayor and other members of the board had the effect of decreasing the request to \$3,750,000. The board finally allowed that amount, Controller Berry not voting.

Mr. Berry pointed out that the board of estimate has approved a program of \$1,500,000,000 for public improvements over the next several years. The borrowing capacity of the city, he said, was \$267,000,000. The present appropriation for the new school will bring the city's school building program up to about \$45,000,000 for the year, he pointed out.



## BY ITS FRUIT

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# M I M E O G R A P H





## News of the Month

### Boston Is Rapidly Abandoning Its Portable Schools

Additional seats will have been provided for 4,500 pupils in the Boston schools when the school year opens in September, says a recent news release. By the end of the year it is expected that sixty portable school buildings will have been abandoned, leaving a total of some 160 portables in use.

The large number of seats is represented by new construction.

As the building program develops, portable buildings, against which much criticism has been directed, will be decreased. A certain number, however, will be necessary to take care of sudden shifts of population, according to Louis K. Rourke, superintendent of construction.

### California Counties Share in State Educational Fund

A total of \$27,412,938.25 will be disbursed by the California state department of education to counties for 1930-31, according to an announcement just made public by the division of research and statistics.

The apportionment, which is based on the average daily attendance during 1929-30, consists of \$19,970,448.31 for elementary schools, \$6,886,128.34 for high schools and \$556,361.60 for junior colleges, the announcement declares.

Los Angeles will receive the greatest amount, the sum totaling \$9,677,055.17. Apportionments to Alameda and San Francisco are estimated at \$2,109,559.53 and \$1,873,179.85, respectively.

### Ohio Plans Survey of Rural Library Needs

A statewide survey of rural library needs in Ohio is to be made with the cooperation of county superintendents, farm bureaus, county federations of women's clubs and similar organizations, according to the state librarian, George Elliott McCormick.

The number of traveling libraries has been increased to 1,000, which is double the total which was recorded at the time these libraries were earlier discontinued, according to Mr. McCormick. In all 125,000 volumes are placed in circulation through this medium.

Books now being returned to the state library during the summer season are cleaned and repaired and packed in boxes of 50 to 75 volumes each. The boxes form the units of standard libraries, ranging from 75 to 1,000 volumes each. The average library numbers 500 volumes.

Complete lists, showing the contents of the various libraries, are furnished on request. Any one of these libraries can be ordered by serial number, and made up by assembling the boxes comprising it, enabling the state library, as now organized, to ship a complete library on twenty-four hours' notice. This formerly required from two to three weeks.

Traveling libraries are loaned on request of schools, churches, granges, parent-teachers' associations, farm bureaus, county federations of women's clubs, Y. M. C. A's., Y. W. C. A's., or any responsible citizen acting for a community. Under Gov. Myers Y. Cooper's policy rural communities lacking other library facilities are served first. As a further extension of the idea, sets of books forming a parental education reading course are loaned direct to individuals, primarily rural residents, who do not have access to public or to traveling libraries.

### Brooklyn Boys to Study Household Science Along With Girls

Instruction in how to run washing machines, electric refrigerators and vacuum cleaners is to be given to boys as well as girls in the new Abraham Lincoln High School, Brooklyn, N. Y.

The establishment of courses in household science is part of a program of progressive education which Gabriel R. Mason, principal, is putting into practice. The experiment which Supt. William J. O'Shea is directing to determine whether the teaching of Hebrew can be made a part of the regular elective offering will be tried out in the Abraham Lincoln High School.

Four thousand pupils will receive instruction in the new school.

### Northwestern University Receives Money for Library

Northwestern University, Chicago, has recently received through the will of the late Charles Deering, Chicago, \$1,000,000 to be used in the erection of a new general library on the Evanston campus of the university.

Plans have recently been completed calling for the expenditure of \$100,000,000 in the course of the next fifty years for the expansion of the Evanston campus and the new library will be the first unit of this project to be completed.

### New Parochial School for Springfield, Mass.

A new parochial school for the Immaculate Conception Parish, Springfield, Mass., is now in process of construction. The building when completed will cost about \$175,000. It is to be 176 feet long, 98 feet wide and two stories high. It will contain twelve standard classrooms and an assembly hall on the first floor to seat 800.

The basement will contain a fully equipped gymnasium.

The building will be built of tapestry brick, light Flemish bond, with trimmings of pink granite. The corridors, staircases and staircase halls will be fireproof. The remainder of the building will be first-class slow-burning construction.



# He Took Up the Draftsman's Pencil to Battle Constipation

The daily output of a lathe operator drops. A child grows listless and inattentive as the school day drags into afternoon. An office worker slumps idly at his desk, neglecting the work before him.

The boundless energy that drove a business genius to the top rung of the ladder, slips silently away, leaving only a dull clod of a mind and body.

Yet doctors tell us that constipation is really nothing but a habit—or rather the lack of one. It is a chronic disorder, of millions, induced by irregular evacuation during youth.

The Clow Soldier of Sanitation took up the draftsman's pencil to fight this enemy of modern man and industry.

His first attack was for the coming generation. It resulted in a closet bowl, efficiently designed to make evacuation easier and more certain for school children.

For many years careless designers had been inflicting high bowls upon children in school toilet rooms.

The seat of the Clow Bowl was lowered, 2 inches closer to the floor. The position of the child is

natural, with knees high and stomach muscles relaxed. Thus by making evacuation easier, regularity is made more of a habit.

Following this first bowl have come others on the same idea to help grown-ups in all walks of life. And the Soldiers of Sanitation score another important victory in their battle against uncleanness, pollution, ill-health and inefficiency.



*The Clow Soldier of Sanitation is a specialist on the acute problems of sanitation that confront every builder of a school, hospital, industrial plant or other public building. At his finger tips is the accrued experience of Clow's 32 years experience—at his back the complete line of fixtures to meet every mass plumbing need. Call him in. This is Frank O. Tintoff, Peoria, Ill.—Southern Illinois Territory.*

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## News of the Month

### Corner Stone Laid of N. E. A.'s New Headquarters

The corner stone of the National Education Association's new headquarters office building, now being erected at Sixteenth and M Streets, Northwest, Washington, D. C., was laid on July 25. The ceremonies were conducted under the auspices of the Grand Lodge of Free and Accepted Masons of the District of Columbia with Fred C. Cook, deputy grand master, officiating for the Grand Lodge. President Joseph Rosier, State Teachers College, Fairmont, W. Va., presided. Addresses were given by Dr. Walter R. Siders, chairman of the board of trustees of the National Education Association; E. Ruth Pyrtle, first vice-president of the National Education Association; Superintendent Joseph H. Saunders, Newport News, Va., a member of the board of trustees, and by United States Commissioner of Education William John Cooper.

The new building, to be completed next February, will make possible the expansion of the headquarters staff of the National Education Association which the rapid growth of the organization has made necessary. Membership in the organization has now passed 200,000.

### Village Colleges Meet With Approval in England

A plan for "village colleges" serving educational and recreational needs of neighboring communities has received endorsement in England, according to an article in the current issue of the *Labor Bulletin* issued by the Department of Labor.

According to industrial and labor information, the Cambridge education committee has indorsed a scheme for establishing centers, to be known as village colleges, to serve groups of neighboring villages. An attempt will be made to coordinate in them all the rural educational services of the county council, such as rural primary and adult education, agricultural demonstration and instruction, public health services, library service and outdoor recreational facilities.

Voluntary organizations, such as women's institutes, the British Legion, Boy Scouts and Girl Guides will also use them as centers, and the playing fields will be available for local athletic clubs. The basic idea of the scheme is that the individual village is too small to support the social and recreational facilities it needs, but that the growth of transportation services has made it possible for a group of small communities to cooperate in providing a center for such activities.

A village college was planned at Sawston five years ago and will be opened in October. It will serve a surrounding area of about six villages. The building will include a hall, seating about 400, a domestic science block, and a workshop and laboratories, and the buildings will be available for concerts, cinema entertainments, and, in the evenings and during holidays, for social gatherings. Separate rooms are provided for public health services, including maternity and child welfare and for committee

meetings. Finally, there is a library and reading room, also school gardens, demonstration plots and a six-acre recreation ground. The cost has been about £16,000 (\$77,864).

Ten similar village colleges are planned in the country. The total capital cost of the scheme is estimated at £124,000 (\$603,446). Toward this fund the Laura Spelman Rockefeller Fund of New York has offered to contribute £45,000 (\$218,993) in view of the example which the scheme will afford of the coordination of statutory and voluntary services in the English countryside and of its relevance to rural life and conditions in other countries. The remainder has been offered partly by public authorities and partly by trust funds or private individuals.

### Pittsburgh Superintendent of Schools Dies

Dr. William M. Davidson, superintendent of schools, Pittsburgh, for sixteen years, died on July 27 following an illness of more than a year.

Doctor Davidson was widely known as an educator. He was a member of the advisory committee on education to study the relation of the national government to education, having been appointed to that post by Ray Lyman Wilbur, Secretary of the Interior, last year. He served as superintendent of schools, Washington, D. C., from 1911 to 1914 when he went to Pittsburgh.

Dr. Ben G. Graham, associate superintendent of schools, Pittsburgh, has been appointed acting superintendent until formal action is taken to fill the vacancy.

### Mississippi Must Use Same Textbooks

A mandatory order requiring all school officials in Mississippi to adhere to the list of textbooks adopted by the State Textbook Commission December 20, 1920, was issued at New Orleans recently by Judge Rufus E. Foster of the circuit court of appeals for the fifth circuit.

Judge Foster's writ enjoins and restrains the school officials "until otherwise inquired of and determined, from recommending or permitting to be used in the elementary schools of Mississippi, any other school books than those adopted December 20, 1929, by the Textbook Commission."

The legality of the December adoption was attacked on the method, the right of the members to places on the commission and the form of the adoption.

The state superintendent of education, W. F. Bond, who is ex officio a member of the Textbook Commission, said that the adoption would cost school patrons more than the previous adoption and that he was opposed to the radical changes made in the books used during the previous five-year period.

The injunction was obtained by book publishing companies which contended that they had already prepared books for use under the new adoption. Opposition to the adoption arose because of changes made from the previous list.



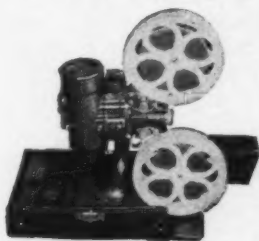
# Eyestrain banished with FILMO School Projector



General science class in the Northeast High School, Philadelphia, studying the life and habits of the ant with Filmo School Projector. Prof. Walter S. Lapp, head of department, in charge. Film subject, "Our Ant Gang", from Filmo Library.

Moving pictures are based on optical illusion. To perfect this illusion—to free it from the last semblance of what lies behind it—has been the task of Bell & Howell engineers for 23 years, and also their glory. For in Filmo School Projector, the illusion is complete and perfect. "Flicker" and "jumping" have been abolished. Where Filmo School Projector is used, eyestrain takes its place among maladies long forgot in the forward march of mechanical and scientific prowess.

Hand in hand with the infinitely precise Filmo shutter mechanism goes the single-tooth Filmo shuttle movement of exclusive design, indispensable to the steadiness of the pictures and the absence of wear on the film. These, with powerful Filmo direct system of illumination, give you motion pictures rivaled only by the finest effects of the professional theater screen.



Ask a nearby Filmo dealer to demonstrate a Filmo School Projector in your own school. Not only will you be impressed with the quality of pictures it projects, but you will marvel at the ease and simplicity of operation with which Filmo School Projector functions. Or write today for literature and the booklet entitled "Filmo in Schools and Colleges."

Filmo 57-E School Projector, with 250 Watt 5 amp. lamp, geared rewind, fixed resistance, 45-50 condenser, and special case, \$205. Other models \$198 up.

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Coaches, Athletic Directors, and Captains of Basketball should avail themselves of the important information contained in our free illustrated booklet, showing in detail the superiority of Nurre Banks . . . as used at the University of Wisconsin, Harmon Stadium in Chicago, Butler Field House, Indiana University, Notre Dame University, Hanover College, and a list of 400 others. Mail the coupon NOW!

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## News of the Month

### Schools and Banks Cooperate to Teach Thrift

School children in fifty of Chicago's suburbs carried their bank books to school and deposited their summer savings in the school savings bank on the first bank day of the new school year.

At the time their deposits were being checked by their fellow pupils who acted as cashiers and tellers, they were receiving lessons in arithmetic, language and geography which demonstrated some fact connected with saving, earning, spending and investing money.

This is part of the new nationwide educational movement which has put the study of thrift into the public schools. The 4,500,000 school children of the United States who were studying in the 15,500 schools in which thrift is part of the regular curriculum made deposits exceeding \$29,000,000 for the school year 1929-30, according to figures supplied by the sponsors of the school savings bank movement in the Middle West.

In Chicago proper one school, Tilden Technical High School, has joined the nationwide thrift education movement. Through the cooperation of a Chicago bank the children began school banking last February. In the four months of the term from February to June, boys of the school entered \$3,931.67 in their bank books.

School children in the Chicago area from Aurora to Hammond and from Lake Forest to Wheaton have deposits to their credit amounting to \$794,187.09. The total amount in savings accounts of school children all over the country is in excess of \$50,000,000.

Under the present plan of operation the schools and banks work together in teaching thrift. Teachers, principals and superintendents explain the idea to children and parents, and the schools everywhere set aside a period each week for thrift study. Banks arrange for the collection of the money, supply pass books and all other literature and paraphernalia needed, and bear the expense of clerical work.

Some individual accounts of school children run into several thousand dollars and have been deposited with such definite objectives as college, education, travel, investment or entrance into business.

### Teachers of Rockford to Be Retired at Age of Sixty-Seven

The following resolution was approved by the board of education of Rockford, Ill., on August 25:

WHEREAS, it is for the best interest of the public school system of the school district of the city of Rockford, Ill., that supervisors, principals and teachers employed by the board of education in and for said school district be retired from active service in said school district upon attaining the age of sixty-seven (67) years,

THEREFORE, BE IT RESOLVED by the board of education in and for the school district of the city of Rockford, Ill., that upon any person and/or persons employed as supervisor, principal or teacher by said board of education attaining the age of sixty-seven (67) years prior

to the first day of September of the calendar year in which such age shall be attained, such person and/or persons shall be deemed by said board of education not to be a candidate for employment as a supervisor, principal or teacher for the school year commencing September 1 of the year in which such person and/or persons shall attain the age of sixty-seven (67) years.

BE IT FURTHER RESOLVED that this resolution shall become effective and applicable to all supervisors, principals and teachers who shall be subject to its terms and provisions on and after January 1, 1931.

### American Education Week Posters Now Available

An attractive set of posters on art paper for use during American Education Week is now available from the division of publications of the National Education Association, Washington, D. C., at the price of one dollar. The posters are suitable for classroom bulletin boards, for school exhibits, as outlines for addresses and essays and for other special occasions.

### Secondary Education Survey Is Progressing

Gratifying progress is being made in the national survey of secondary education, the specialist in secondary education, Carl A. Jessen, stated recently.

The expenditure of the funds provided by Congress for the fiscal year, he said, had been kept down to a minimum, less than \$25,000 having been spent up to July 1. A total of \$50,000 was made available for the current year, and \$100,000 for next year.

Estimates for the coming year contemplate an expenditure of one-sixth of the total amount for general direction as well as direction of special investigations by part-time specialists, Mr. Jessen pointed out. One-half of the total amount will provide for salaries of full-time employees, and one-third for travel and supplies.

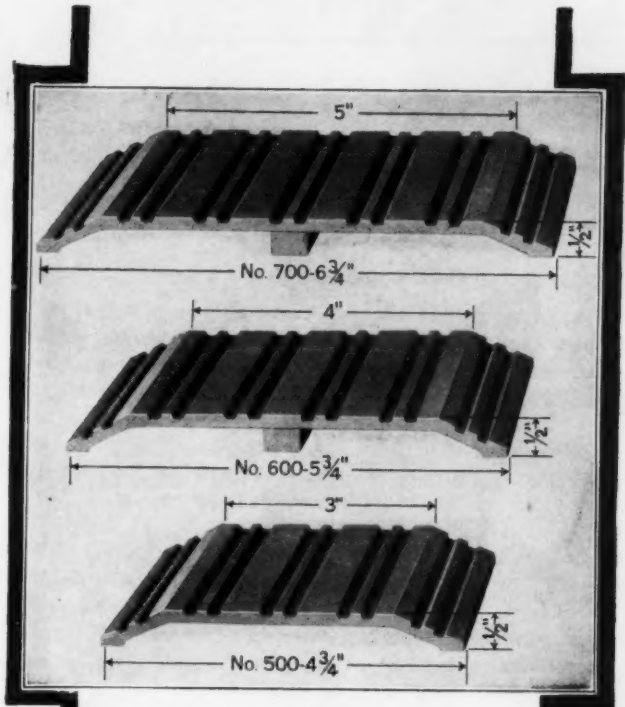
Expenses have been kept down by procuring eminent specialists for part-time work on the one hand, and by obtaining at little expense services of others at other times, Mr. Jessen explained.

Specialists employed in their investigations are studying the literature of the field and recording data from questionnaires sent out to the local, municipal, and state school systems, he said.

Among important investigations under way, Mr. Jessen called attention to those of the junior high school reorganization, school district organization for the administration and supervision of secondary education, selected secondary schools in smaller communities and rural areas, and curriculum.

A characteristic feature of the whole survey is the correlation of all individual investigations, Mr. Jessen explained. Specialists confer with each other and communicate with each other from time to time to ascertain facts peculiar to the study of each.

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## Thresholds of Architectural Bronze

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The durability of architectural bronze lies not only in its hardness but in its perpetually new appearance. Even when worn its dignity is unimpaired. Consider with this the pleasing extruded design and you can imagine the effect this choice of thresholds will have on the observant visitor.

However, considerations even more practical suggest that you discuss this item with your architect. Inasmuch as he will, as most architects do, recommend Rixson Floor Checks for your school doors, it is a valuable feature that Rixson Thresholds are made ready drilled for mounting any Rixson Check. Thus, labor and time are conserved.

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## News of the Month

### Ohio to Conduct Teachers' Forum by Radio

A monthly radio forum for the teachers of Ohio will be inaugurated by the Ohio School of the Air in September, the director of education, J. L. Clifton, announced in a statement made public by the department of education.

At the close of the school day on the specified occasion, superintendents, principals and teachers will assemble before loud speakers and hear specially prepared addresses by acknowledged leaders in American education.

In advance of the special addresses, the topics will be made public and the school men will be requested to submit in advance questions which at the end of the prepared speeches will be answered. Provision also will be made for the listening groups to wire or telephone questions or subjects they wish to have discussed.

It is believed that this method of reaching the whole group of educators in the public school system will be superior to crowded and noisy convention halls where addresses of this kind usually occur.

The superintendent also stated that arrangements have been made to broadcast parent teachers' meetings. Through the Ohio Congress of Parents and Teachers, plans are being developed to have these meetings held in the evening and broadcast to groups of parents and teachers assembled in the school buildings and homes of each community in the state.

### Minnesota Professors Write Scientific "Book of the Month"

Professors J. Arthur Harris, Clarence M. Jackson, Donald G. Paterson and Richard E. Scammon, all of the University of Minnesota, are the authors of "The Measurement of Man," a symposium in biometrics which was chosen by the Scientific Book Club as its "book of the month" for August.

### Divorce of Government and Education in Haiti Urged

Dr. Robert R. Moton, of Tuskegee, Ala., president of the Tuskegee Institute, and chairman of the commission named last winter by President Hoover to make a study of the Haitian educational problem, has made an informal report to President Hoover on the results of his studies in Haiti.

The commission returned recently from Haiti after a twenty-four day investigation into the Haitian educational system. They went immediately to Petersburg, Va., to attend a Negro educational conference.

Doctor Moton declined to discuss the nature of the recommendations he will make to the President, but said that he had come to the conclusion that education should be divorced as far as possible from government.

The situation in Haiti at the present time is tense,

Doctor Moton said, because of the imposition of taxes on rum and tobacco by the recent government of President Borno, which affects all the peasant population. Doctor Moton expressed the view that something should be done immediately to remedy the situation.

The members of the commission in addition to Doctor Moton are Dr. Mordecai Johnson, president, Howard University; Prof. Leo M. Favrot, field secretary, General Education Board; Prof. Benjamin F. Hubert, president, Georgia State Industrial College, and Dr. W. T. R. Williams, dean, Tuskegee Institute.

### Negroes Plan Parochial School and Community Center

The parish of St. Peter Claver, the only Roman Catholic Church for Negroes in Brooklyn, N. Y., is planning to build a convent, parochial school and community center which will cost \$300,000.

The new construction will consist of a four-story building, one feature of which will be a dental and medical clinic which will be open six days a week. The clinic will be conducted by a staff of nurses and doctors who will give treatments free. Other features of the building will be a gymnasium, running track, bowling alleys, recreation rooms, a large auditorium and a roof garden.

### Old Mansion to Give Way to Modern School

The picturesque Van Fleet mansion, Douglaston, N. Y., which has been used as a school since the death of the last Van Fleet in 1919, is to be razed and a new, modern brick school building erected in its place this Fall. The mansion is distinguished by its chimneys and fireplaces built of field stones gathered from three continents, but it is no longer adequate to provide for the school children.

The new school will be two stories high and will accommodate 770 pupils from the kindergarten to the eighth grade. It will have a modern auditorium, gymnasium, shop and domestic science kitchen. It will cost about \$360,000.

### Auditorium on Third Floor Causes Controversy

Because the auditorium had been placed on the third floor in the plans of the new state trade school building at Meriden, Conn., the building commission, upheld by the state police, decided that the building would not be entirely fireproof and ordered the plans to be changed. Under the revised drawing the auditorium-gymnasium will be on the second floor, and the building itself will not be materially changed. The delay caused by the change of the interior plans may hinder the opening of the building, it is said, which had been planned for September 1.

## AS THE SCHOOL YEAR STARTS

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## In the Educational Field

JOHN J. LAMBERT has been elected president of the board of education, Elmsford, N. Y. MR. LAMBERT has been a member of the board for eleven years. He succeeds THOMAS ENGLISH, retired.

JOHN J. DRISCOLL, principal, Public School 16 on Daniel Low Terrace, Tompkinsville, Staten Island, for the last thirty-five years, died recently after a long illness.

MRS. CORA FULTON has been named president of the board of education, Wichita, Kan., and is the board's first woman president since 1870.

T. KENOLEY HARRISON has been named business manager, Western Maryland College, a position created recently by the board of trustees. MR. HARRISON was graduated from the college in 1901.

R. B. BEARD has resigned as supervising principal of schools, Portage, Pa., to become director of educational research, Pennsylvania State Teachers' College, Indiana, Pa.

CHARLES A. TILDEN has resigned as director of the East Cleveland schools, East Cleveland, Ohio. MR. TILDEN's duties have been taken over by WILLIAM M. COUNCELL, the new business manager.

W. A. BEALLE has been chosen superintendent of schools, Lumberton, Miss.

HENRY H. HILL, head of the department of school administration, college of education, University of Kentucky, has been named superintendent of schools, Lexington, Ky.

DANIEL T. WEIR has been formally appointed assistant superintendent of schools, Indianapolis, at the request of PAUL C. STETSON, superintendent. MR. WEIR served as acting head of the Indianapolis school system until a permanent superintendent could be selected.

THE REV. WALDEN PELL, 2nd, has been chosen headmaster of St. Andrews, the new school for boys, Middletown, Del.

H. CARROLL MCKINLEY has been named superintendent of schools, St. Paris, Ohio, succeeding J. M. TURNER, resigned.

WARREN B. LYMAN is the new superintendent of schools, Stoughton, Mass., succeeding FRANK A. MORRIS. MR. LYMAN served the towns of Ashland and Hopkinton, Mass., for thirteen years prior to his present connection. MR. MORRIS has accepted the superintendency at Newport, N. H.

JAMES R. FLOYD, principal, Jefferson School, Plainfield, N. J., has been appointed principal of the Lincoln School, Newark, N. J. He succeeds ANNA B. HASBROUCK, retired.

THOMAS H. DECOUDRES has been named superintendent of schools, Johnston, R. I., succeeding EVERETT C. PRESTON, resigned.

H. R. BROWN, the former superintendent at St. Cloud, Minn., will head the schools of Virginia, Minn., for the coming year.

HUGH S. DUFFY, for nineteen years connected with the schools of Winchester, Va., has resigned as superintendent of schools of that city. His successor has not been chosen.

C. W. HOWARD, Holcomb, Kan., has been appointed superintendent of schools at Palo Alto, Calif.

HUBBARD FLETCHER SRYGLEY, for the past eight years superintendent of the Raleigh, N. C., schools, has been elected to the superintendency of the schools of Nashville, Tenn. MR. SRYGLEY will succeed J. J. KEYES, who has been in charge of the schools since the resignation of the late PROF. H. C. WEBBER in January.

DANIEL FISH, Lutesville, Mo., has been appointed county superintendent of schools to succeed WILBUR M. WELKER, who resigned to become head of the Lutesville High School.

GEORGE WILCOCKSON will take up his new duties as superintendent of the schools of Taylorsville, Ill., when school opens this month.

DR. W. ROBERT KEASHEN is the president of the Ansonia, Conn., school board, succeeding WILLIAM G. ENNIS, resigned.

DR. FRANK T. VASEY has been elected superintendent of schools at Springfield, Ill. DOCTOR VASEY was formerly superintendent at Mason City, Iowa.

F. R. WEGNER, Ithaca, N. Y., has received the appointment to the superintendency at Little Falls, N. Y.

B. C. LAMBERSON, a teacher in the grade schools of McConnellsburg, Pa., is the newly elected superintendent of the schools of Fulton County, Pa.

DR. EDYTHE HERSHEY, for five years connected with the University of Texas in the division of nutrition and health education, has received the appointment of director of health in the Dallas city schools.

THE VERY REV. THOMAS F. LEVAN, for eleven years president of De Paul University, Chicago, has been appointed head of St. Mary's Catholic Seminary, Perryville, Mo. THE VERY REV. FATHER FRANCIS V. CORCORAN, for several years head of Kendrick Catholic Seminary, Webster Grove, Mo., will succeed FATHER LEVAN as president at De Paul.

J. K. BARRY, for the past eight years superintendent of schools at Smithville, Texas, has been appointed superintendent of the Campbell, Texas, schools.

WARREN E. BOW has been appointed to fill the recently created post of fourth assistant superintendent in the Detroit public schools. MR. BOW will be in charge of all vocational schools.

W. T. HOOVER, the former superintendent at Wellsville, Kan., will head the schools of Tonganoxie, Kan., for the coming year.



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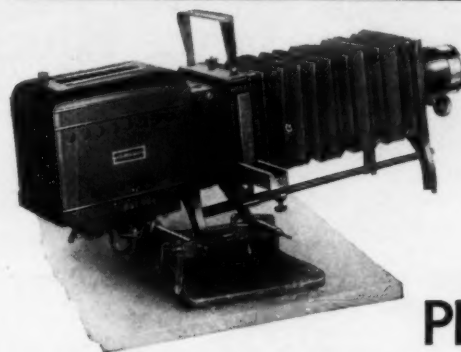
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## In the Educational Field

ROBERT COUGHLIN, superintendent, Warren Harding High School, Bridgeport, Conn., has been named president of the Connecticut Association of Public School Custodians and Engineers, New Haven.

GEORGE H. TURNIPSEED, county superintendent, Henry County, Kentucky, has resigned.

DR. THURMAN D. KITCHIN is the new president of Wake Forest College, Wake Forest, N. C., succeeding DR. FRANCIS P. GAINES who has accepted the presidency of Washington and Lee University. DOCTOR KITCHIN was formerly dean of the medical school of Wake Forest College.

THEODORE HALBERT WILSON has been appointed president, Chevy Chase School and Junior College, Washington, D. C., succeeding the late DR. FREDERIC ERNEST FARRINGTON. MR. WILSON was formerly principal, St. Johnsbury Academy, Vermont.

KATHERINE BAUER, junior high school principal, New York City, has been named to succeed DR. THOMAS O. BAKER as a district superintendent in that city. MISS BAUER is the seventh woman on a board of thirty-two district superintendencies.

ROY L. McLAUGHLIN, superintendent of the Sockanosset School for Boys, Cranston, R. I., has been appointed superintendent of the Connecticut School for Boys, Meriden.

E. R. HADLOCK, Union City, Pa., succeeds I. H. RUSSELL, retired, as superintendent of schools, Erie County, Pa. MR. HADLOCK has been assistant superintendent of the county schools since 1915.

J. H. NEFF, Alexandria, Pa., has been elected superintendent of schools, Huntington County, Pa.

DR. CLYDE H. GARWOOD, superintendent of schools, Harrisburg, Pa., since 1923, has been unanimously elected superintendent of the Bloomsburg school district, Bloomsburg, Pa. MARTIN W. THOMAS succeeds DOCTOR GARWOOD.

REX W. DIMMICK has been elected superintendent of schools, Donora, Pa., succeeding THOMAS M. GILLAND who has been connected with the Donora schools for eighteen years.

L. A. DuDAHN, Fostoria, Ohio, is the new superintendent of schools, Pottsville, Pa.

DR. CHARLES CALVERT ELLIS has been elected president of Juniata College, Juniata, Pa., succeeding the late MARTIN GROVE BRUMBAUGH. DOCTOR ELLIS has been vice-president of the college since 1917.

FREDERIC J. KELLEY, president, State University of Idaho, Moscow, has resigned.

THOMAS W. SHEEHAN, dean of education, Seton Hills College, Greensburg, Pa., has been named superintendent of schools, Peabody, Mass. MR. SHEEHAN will fill the vacancy caused by the recent resignation of ALBERT W. ROBINSON.

DR. CHARLES OLIVER GRAY has resigned as president of Tusculum College, Greeneville, Tenn., after a service of twenty-two years. Tusculum College is said to be the oldest college in Tennessee.

S. T. GODBEY, superintendent of schools, Galax, Va., has resigned to become field supervisor of physical and health education, Seventh Educational District of Virginia.

DR. GEORGE E. GUILLE, Athens, Tenn., has been named president of Bryan Memorial University that is now being built in Dayton, Tenn., as a tribute to William Jennings Bryan. DOCTOR GUILLE has been for more than fifteen years a worker of the Moody Bible Institute, Chicago.

WILLIAM E. GILLIS, principal, Derby High School, Derby, Conn., has accepted the superintendency of the schools of East Haven, Conn. MR. GILLIS succeeds W. B. NOYES who has accepted a similar position in Stonington, Conn.

WALTER E. HAMMOND has resigned his principalship in Millburn, N. J., to accept a position as superintendent of schools, Keene, N. H.

LOWELL E. JEPSON has been elected president of the school board, Minneapolis, Minn., for the coming year. MR. JEPSON served as president of the board in 1926-27.

MRS. TERESA MILLER, teacher in the schools of West Bridgewater, Mass., for the last fourteen years, has been elected principal of the Sunset Avenue School of that city.

FRANK D. MUNROE, for the last two years supervising principal, Oxford High School, Oxford, N. J., has been appointed superintendent of schools, Phillipsburg, N. J.

JOHN A. TRUE is the newly elected superintendent of schools, Council Bluffs, Neb. MR. TRUE was superintendent of schools, McCook County, Neb., for eleven years. He succeeds THEODORE SAAM who becomes head of the schools in Elgin, Ill. J. C. MITCHELL, Holdrege, Neb., succeeds MR. TRUE.

MRS. MARY B. CARTER, principal, South School, Torrington, Conn., for the last forty-one years, has been retired at her own request. MRS. CARTER has been a school teacher for the last fifty-six years.

WILLIAM E. HEBARD, superintendent of schools, Chester, Mass., has been elected head of the Charlemont school district, Charlemont, Mass.

J. W. TEEL, Newville, Ala., has been elected superintendent of the Willacoochee Consolidated School, Willacoochee, Ga.

VICTOR H. NOLL, instructor in educational psychology, University of Minnesota, on August 1, became educational secretary with the National Survey of Secondary Education, under the auspices of the United States Department of the Interior.

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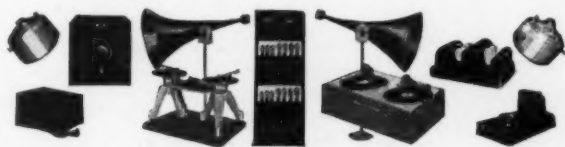
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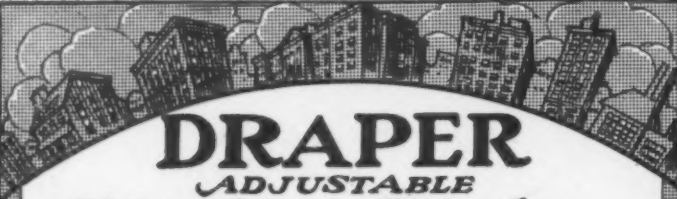
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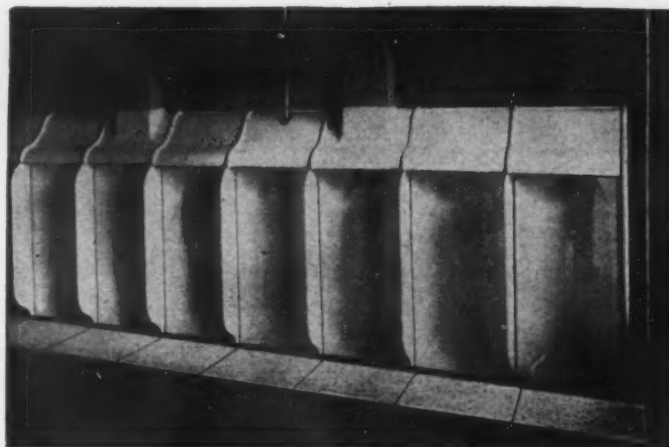


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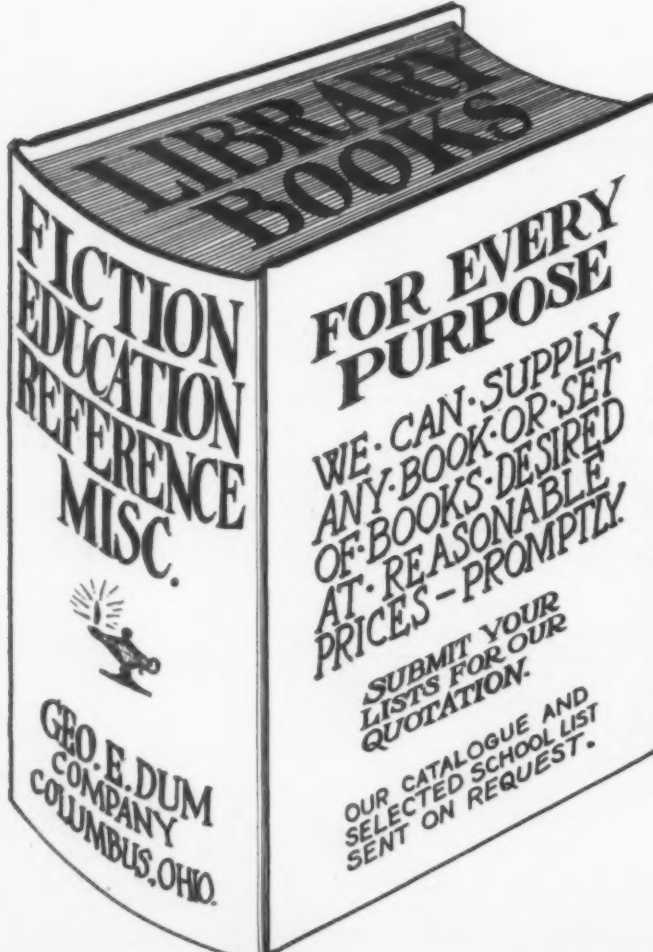
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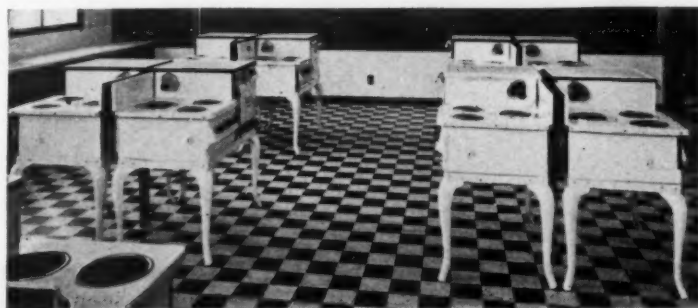


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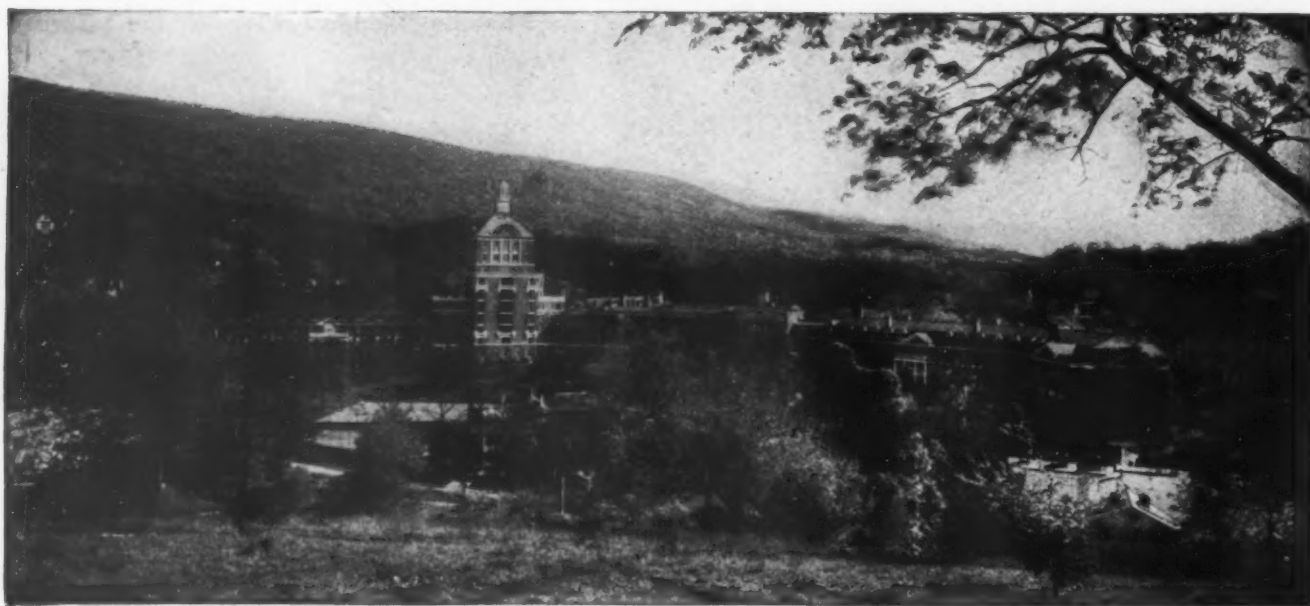
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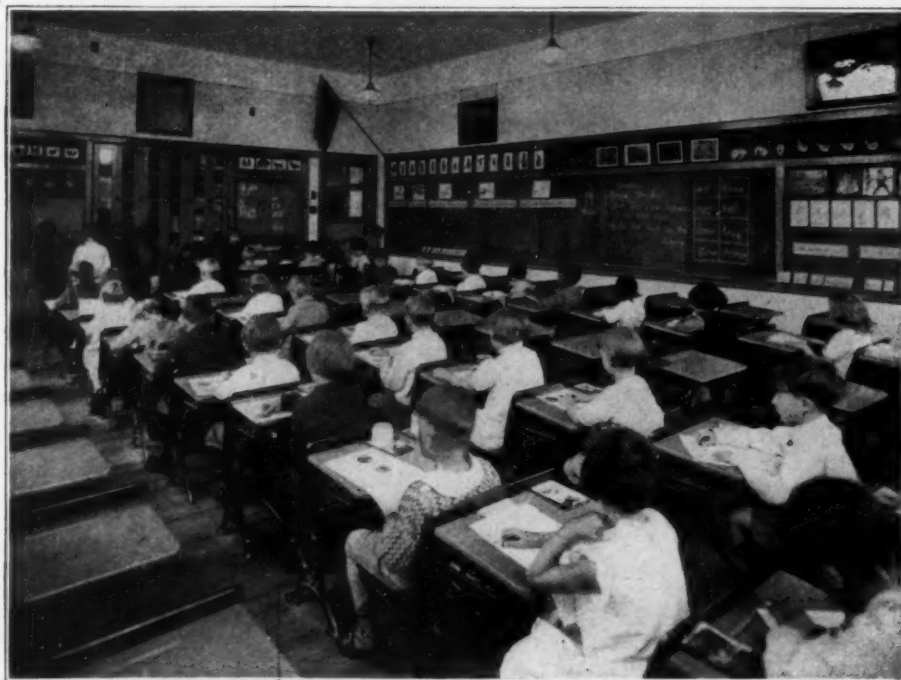
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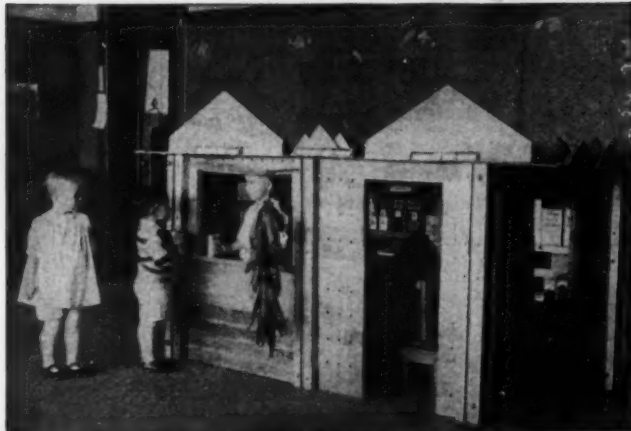
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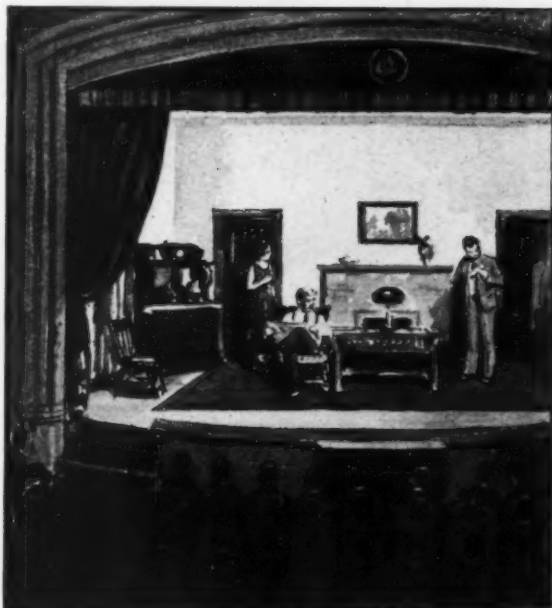
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The foundation for the success of a modern stage presentation is a well equipped stage. Colored lighting adapts itself to the dramatic moods of a play; good scenery forms a background of reality; dependable rigging brings the curtain up or lowers a scenic drop swiftly, silently. Such equipment heightens the enjoyment of an audience. It shares in their applause. Good stage equipment is as essential to well produced school dramas as good projection equipment to the showing of motion pictures.

Complete stage and projection-booth equipment—much of it designed especially for school use—is carried by each of the thirty National Theatre Supply Company branches. One of these branches is conveniently near your school. Return the coupon for further information.

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Please send me further information concerning the equipping service you offer the school auditorium. I would like also specific data regarding the equipment I have checked in the accompanying list.

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School .....

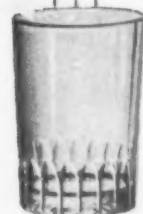
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*Branches in all Principal Cities*

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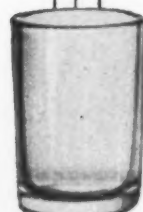




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


Every  Tumbler is accurate to a minute degree for contents. Among the many tests that each  Tumbler must undergo is this Capacity Test. This attention to every detail in the manufacture of  Tumblers insures a product of highest quality at all times.

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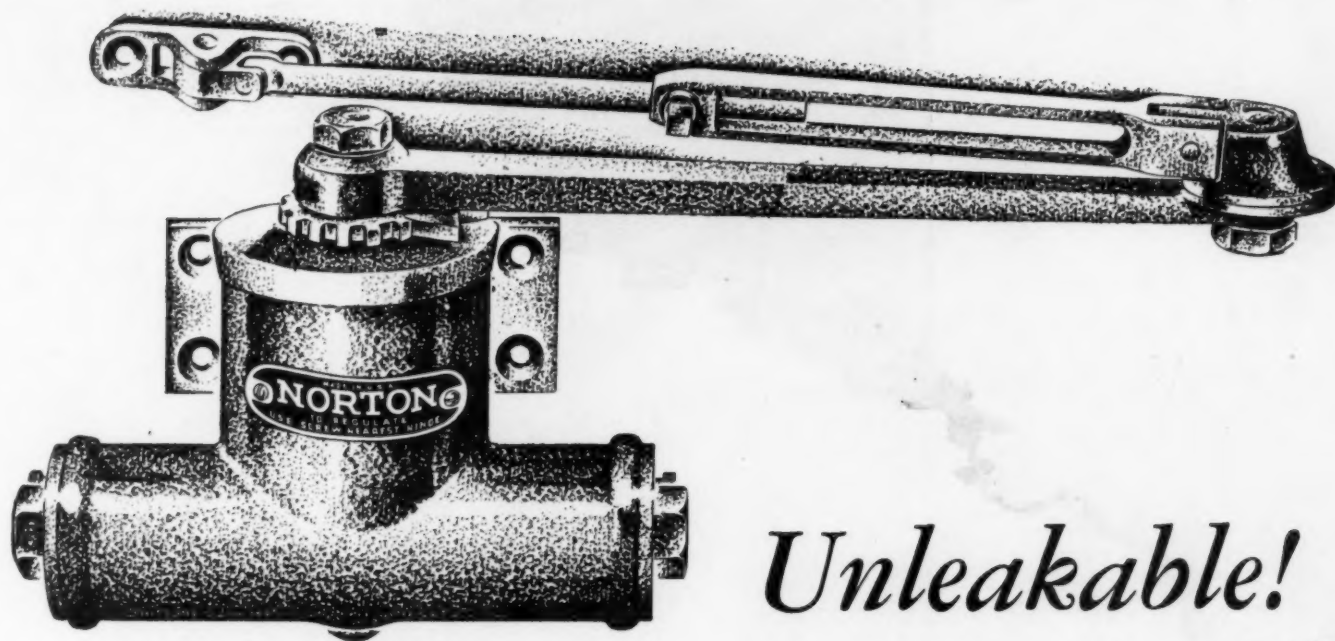
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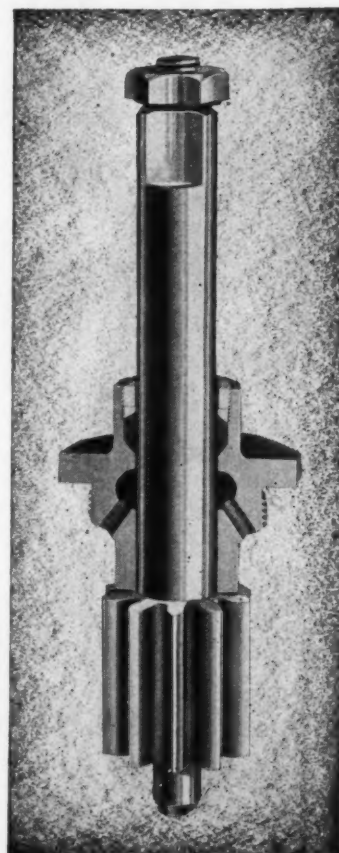
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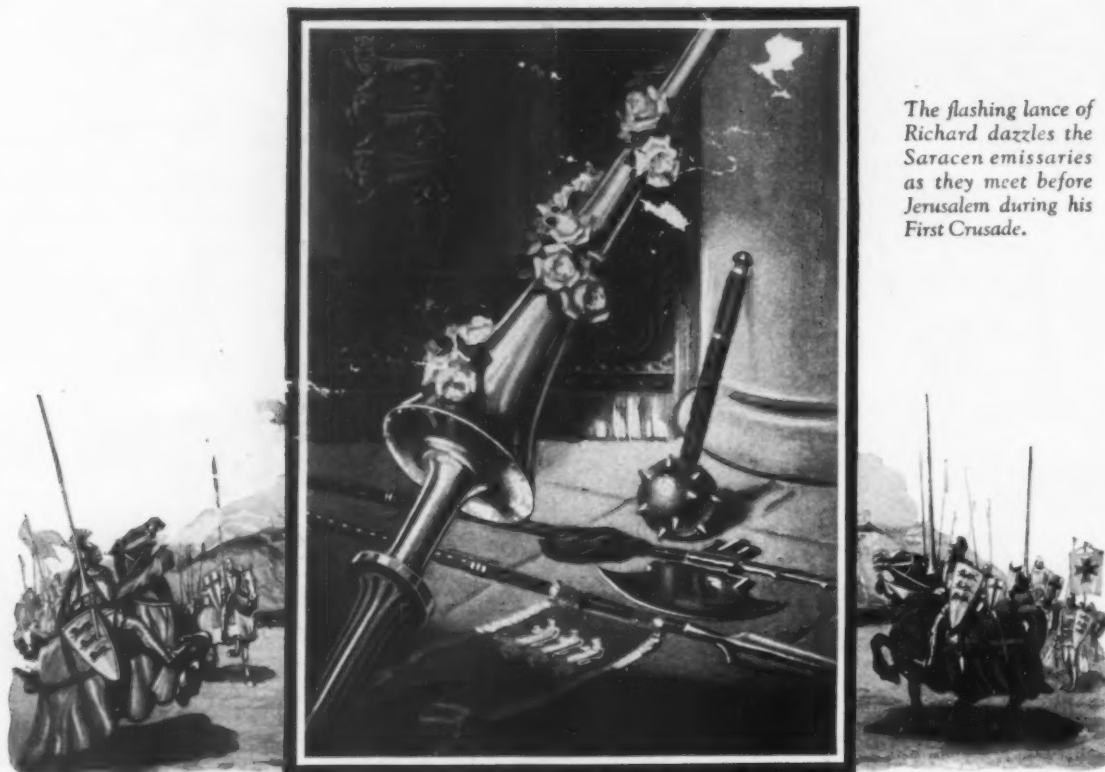
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*Division of The Yale & Towne Mfg. Co.*

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NORTON DOOR CLOSERS



The flashing lance of Richard dazzles the Saracen emissaries as they meet before Jerusalem during his First Crusade.

Lance of Richard, Painted by Ludwig Gassner

# PIERCING *the Heart of Waste*



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THE lance of Richard The Lion Heart, fashioned of steel, graceful but sturdy, struck terror to the hearts of his adversaries. And today steel, fashioned by Lyon craftsmen into school equipment, is a powerful weapon against the arch-enemy of modern efficiency—Waste!

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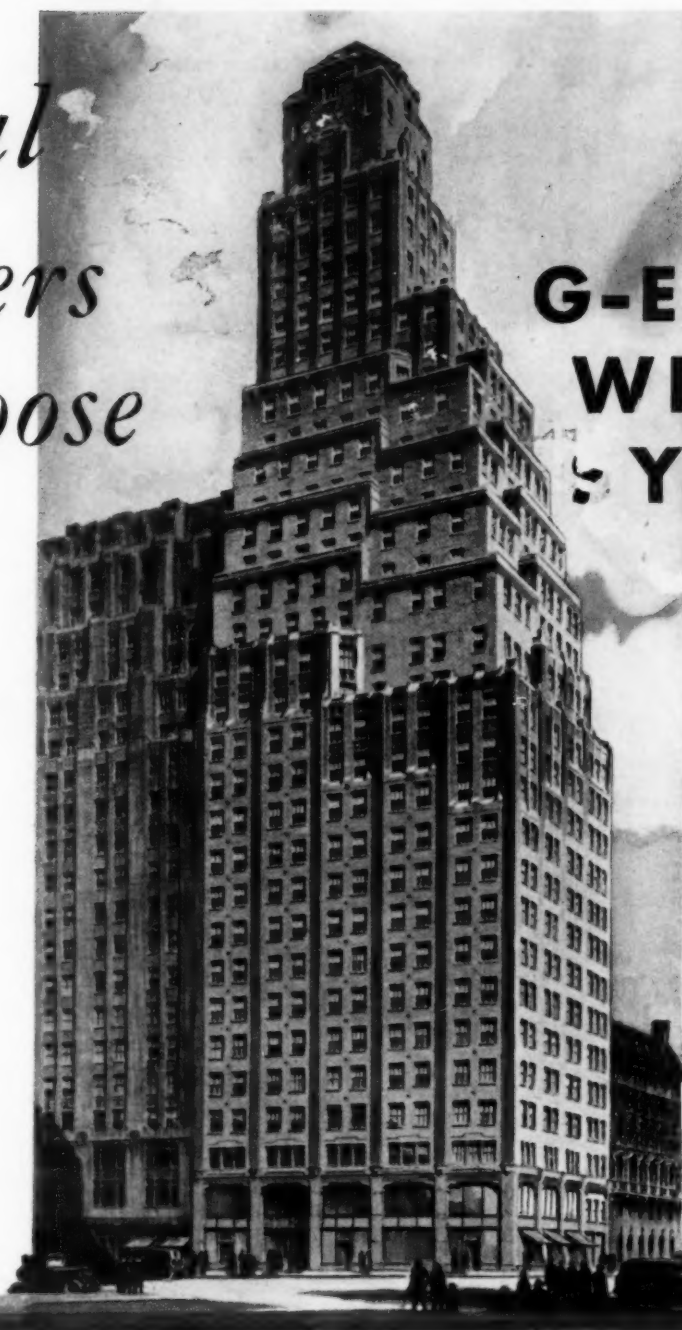
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It is chosen every day by architects, builders, contractors everywhere because it helps attract

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WIRING SYSTEM**

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# —at last a waste-proof cleaning material



Here is a method by which you may cut your cleaning costs in half. Take five minutes and make this startling experiment—see with your own eyes why Soilax is waste-proof.

It has been conservatively estimated that over one-half of all cleaning materials used is wasted—dumped down the pipe, so to speak, by careless people.

Soilax, the patented cleaning material, is waste-proof because a color signal warns the operator when too much is used.

In its original state, Soilax is a pink powder. When used in correct proportions, Soilax forms a green solution as shown in the glass to the lower right. But when too much is used—the moment a careless employee starts to waste Soilax—the solution immediately turns yellow—a warning signal that only the color blind can ignore.

Think of it—a warning signal against waste! Waste—that great unknown quantity—that eater of profit—eliminated! No wonder thousands of institutions will use no other cleaning material.

Soilax, in addition to being waste-proof, exerts a cleaning action equally unique. Grease is emulsified—dishes and glassware washed in Soilax emerge with a pristine luster. Soilax also detarnishes silverware instantly without burnishing or rubbing.

Use Soilax for all your cleaning needs. Many have found that Soilax cuts their cleaning costs 25% to 50%—and with far better cleaning results. The letters in the column to the right tell the convincing story of satisfied users—outstanding institutions who will use nothing but Soilax, the modern scientific cleanser.

## Economics Laboratory, Inc.

Executive Offices  
Minnesota Building,  
Saint Paul, Minn.

Manufacturing Plant  
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Chicago, Ill.

### Representatives and Warehouse Stocks in the Following Cities:

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		Louisville		

**Soilax**  
"A LITTLE DOES A LOT"

## THE VERDICT OF USERS:

### From Detroit, Michigan

I have used Soilax for the past three years in the Steward's Department of the Book-Cadillac Hotel, Detroit, and feel as though I am qualified to state that Soilax has proved itself to be a very exceptional product.

Soilax has been the most satisfactory product we have ever used for the dishwashing and glass washing machines, for not only are the dishes and glasses turned out spotlessly clean, with a high lustre and sparkle, but the machines are kept free from grease and lime deposits and the drains are never clogged.

While it is true that Soilax costs more per pound than ordinary products, the efficiency is far greater and the ultimate cost is less, therefore, making it an economical product.

It is the writer's opinion that Soilax is everything it is represented to be and a little bit more.

C. A. Lind,  
Chief Steward, Book-Cadillac Hotel

### From Tulsa, Oklahoma

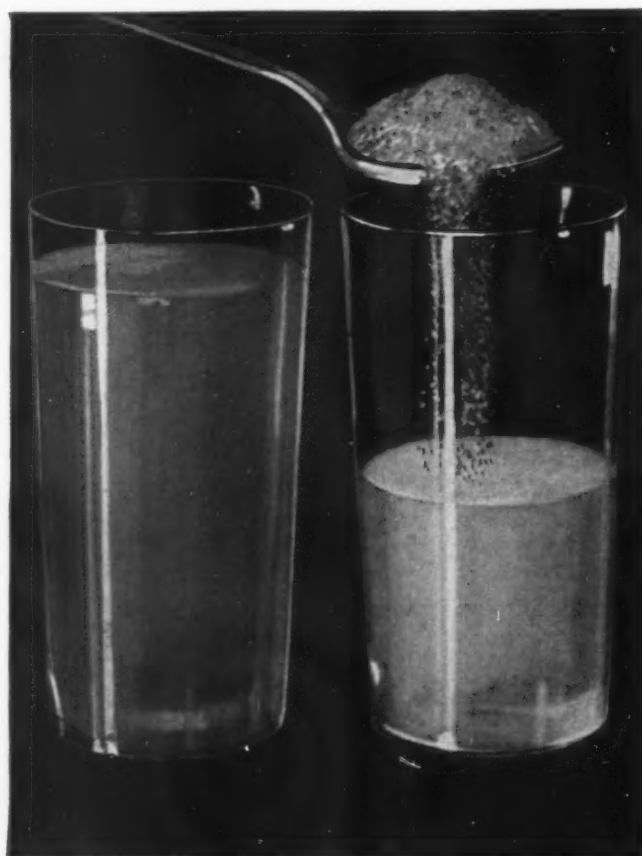
I want to take this occasion to tell you that never before in my experience have I used a product that was more satisfactory. Soilax not only thoroughly cleanses the dishes in the dish machine, but it has a chemical reaction on the machine and aids materially in eliminating corrosion caused by the alkali in the water in this part of the country. In addition, it has qualities that are very good for cleaning tile and terrazzo floors.

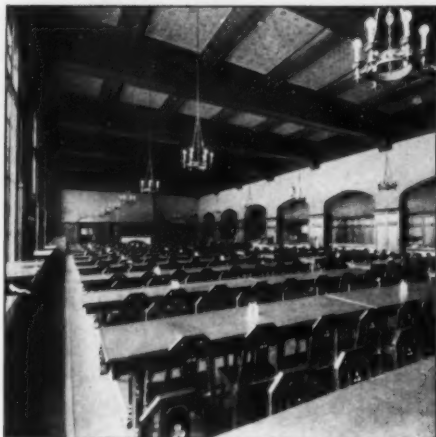
P. J. Cannon,  
General Manager, The Tulsa Club

### From Saint Louis, Missouri

Soilax has proven to be more than satisfactory. In fact, for dish washing and detarnishing silverware, it is superior to any other cleaner we have ever used, both in results and economy of cost.

J. E. Byrnes,  
Roosevelt Hotel

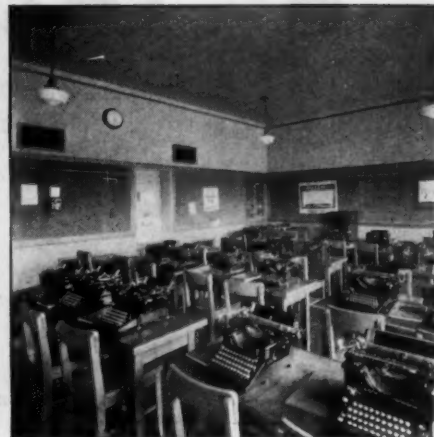




*Acousti-Celotex subdues the clatter of dishes and babel of voices in the Grosse Pointe High School cafeteria ... and adds decorative beauty to the ceilings as well.*



*Acousti-Celotex controls sound perfectly in the Grosse Pointe High gymnasiums. Noise is quickly absorbed ... making the work of instructors easier, and increasing the pleasure of watching games.*



*You can well imagine the terrific din these typewriters are capable of creating. But Acousti-Celotex in the ceiling subdues this nerve-racking clatter and makes concentration easier.*



*Grosse Pointe High School, Grosse Pointe, Mich., where Acousti-Celotex subdues distracting noises and improves acoustics. Architect—George D. Hass. Contractor—George P. Little Co., Detroit, Mich.*

## Acousti-Celotex solved the noise problem for this Michigan School

**L**ECTURES, study periods, and entertainment in the Grosse Pointe, Michigan, High School are never disturbed by distracting noise.

Acousti-Celotex applied to the ceilings of this beautiful school subdues classroom noises ... quiets the racket in corridors and gymnasiums ... adds to the enjoyment of speeches and school entertainments by providing correct acoustics.

Acousti-Celotex comes in finished units, durable and permanent, which are quickly applied to the ceilings in old or new buildings. The natural buff

color and pleasing fibre texture of Acousti-Celotex enhance the beauty of any ceiling. And it may be painted and repainted without impairing its acoustical efficiency.

Let us explain how you can subdue noise and improve the acoustics in *your* school with this remarkable material. Write for our new folder, "Better Study Conditions in Schools."

The word "CELOTEX" (Reg. U. S. Pat. Off.) is the trademark of and indicates manufacture by The Celotex Company, Chicago, Illinois

### THE CELOTEX COMPANY

919 N. Michigan Ave., Chicago, Illinois. In Canada: Alexander Murray & Co., Ltd., Montreal. Sales distributors throughout the World. Acousti-Celotex is sold and installed by approved Acousti-Celotex contractors.

# ACOUSTI-CELOTEX

FOR LESS NOISE—BETTER HEARING



# General Business Science

by

*Lloyd L. Jones and Lloyd Bertschi*

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An explanatory course corresponding to the required courses in General Science and General Mathematics.

The text is accompanied by a series of most interesting projects for each unit of the text. These projects bring the pupil into actual contact with those business activities that enter into the daily life of every citizen regardless of his calling.

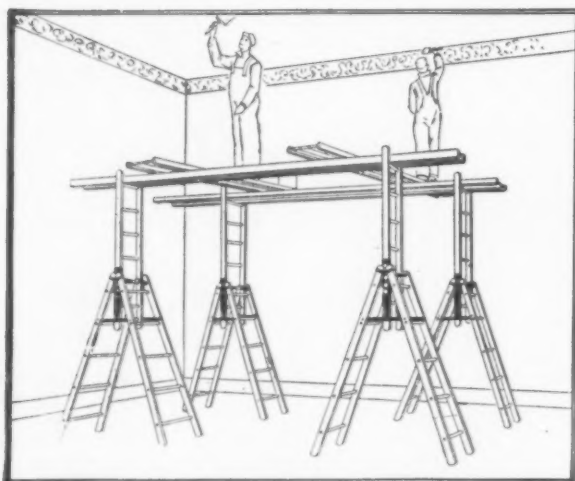
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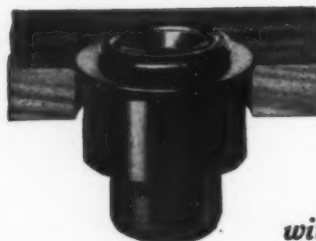
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designed to order.*

and colors, the fact that it is vitrified and therefore low in breakage, its ready and economical replacement—all these qualities have made Syracuse China the choice of hundreds of the nation's prominent schools. ¶ Nearly all institutional dealers carry Syracuse China. If you have any difficulty, write direct to the Onondaga Pottery Company, Syracuse, New York.



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A PRODUCT OF ONONDAGA POTTERIES

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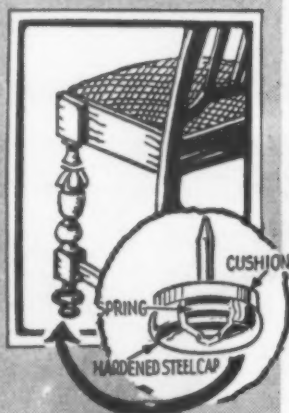
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Asbestos curtains,  
Velour curtains

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Stage scenery for your  
Auditorium stage.

Twenty years of experience in equipping High Schools has placed us in a position to know the particular requirements for your stage.

*Write us for further information or request call from our representative.*

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Treads**



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Successors to The Safety Stair Tread Co.



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Let your pupils trace it on a W. C. Globe!*

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Needs a Weber  
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**FOLDING  
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Also **RESS-TOE LOCK  
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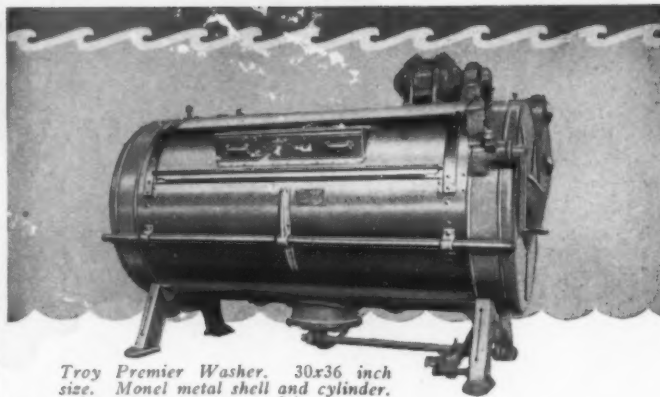
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size. Monel metal shell and cylinder.  
Type A motor drive.*

**Saves on space . . .  
but gives big service**

Although it is a small size washer requiring only 63x47 inches of floor space, this Premier does a full size job of washing school linens economically. It embodies the same thoroughness in construction that characterizes the larger Troy machinery.

Premier economies prevail not only on the score of space saving but also in supplies, washing time, and in operating and maintenance costs. For further information and for aid in solving school laundry problems, feel free to consult Troy at any time. No charge . . . no obligation.

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tects, J. O. Marchand &  
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Flushwood Doors in both op-  
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The beauty of its design is recognized  
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building, which is noted for its architec-  
tural correctness.

No matter what the door requirement,  
FLUSHWOOD can meet it fully and  
bring as well, many new features that  
few other doors can boast.

### MORGAN WOODWORK ORGANIZATION

MORGAN SASH and DOOR CO.  
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Oshkosh, Wis.; New York City

MORGAN MILLWORK CO.  
Baltimore; Jersey City; Greensboro, N. C.;  
Wilmington, Del.; New Haven, Conn.

# Students who learn on the most efficient machine become *the* Most Efficient Operators



**A**LL through their business careers, your students will thank you for getting them accustomed to the make of typewriter that takes less work to run than any other make. And for teaching them on the most efficient machine!

Considerations like these are now putting L C Smith typewriters into schools that have got along for years with other, less efficient machines.

An impartial test conducted at a

famous technological institute has shown that the L C Smith requires less work to operate than other standard makes.

At the same time, its ball-bearing action makes it by far the most efficient machine.

Write for our illustrated literature. It will open your eyes to significant facts about typewriters that are not generally known, even to those entrusted with the teaching of typing!

**L C SMITH & CORONA TYPEWRITERS INC**  
722 Washington Street, Syracuse N. Y.



make  
classes  
more

# interesting with RCA RADIO

CENTRALIZED

SCHOOL authorities and architects are enthusiastically installing RCA Centralized Radio in the schools of America.

They have found it of tremendous aid in holding the interest of students.

RCA Centralized Radio is extremely simple, economical; prevents future wiring costs, and avoids unsightly individual antennae and lead-in connections.

RCA engineers design each installation to meet the special needs of the school. Although fully standardized, no equipment is ever "adapted" with the unsatisfactory results which accompany such practice.

Central control equipment, located usually in the principal's office, brings as many as four different broadcast programs to any or all class or assembly rooms. Either Radio or Phonograph reproduction is available by means of specially designed loud speakers of highest quality.

### Let us prepare estimates

Descriptive pamphlets of this system and photographs of typical installations are available to architects, school boards, superintendents and principals.

Without any obligation, we shall gladly prepare plans and estimates for installations of any size.

Engineering Products Division, Section F  
**RCA VICTOR COMPANY, INC.**

261 Fifth Avenue, New York City  
100 West Monroe Street, Chicago, Ill.  
235 Montgomery Street, San Francisco, Calif.

Representatives in Principal Cities

See the permanent RCA Centralized Radio Exhibit at the RCA-Victor Salon Boardwalk, Atlantic City



First cost is truly last  
cost when Alberene  
Stone is used.

Even though Alberene Stone may cost a few dollars more at the outset, its original cost is its only cost. Acids, alkalis, fumes and flames leave this natural stone as they find it—smooth, unstained, unspalled. Its freedom from upkeep cost has earned a preference for it in the educational field as in other fields where laboratories receive severe, constant use. You see Alberene Stone equipment not only in Frick Chemical Laboratory, Princeton Univ., and Sterling Laboratory, Yale Univ., but in the hundreds of smaller laboratories erected in recent years by public and private schools. First cost is truly last cost when Alberene Stone is used, and we will gladly supply detailed information, as well as our Laboratory Bulletin containing valuable facts on laboratory design. Alberene Stone Company, 153 West 23rd Street, New York. Branches at Chicago—Cleveland—Pittsburgh—Newark, N. J.—Washington, D. C.—Philadelphia—Boston—Rochester, N. Y.—Richmond. Quarries and Mills at Schuyler, Virginia.

# ALBERENE STONE

Table Tops, Fume Hoods, Shelving, Sinks



# BANANAS

## *in the School Cafeteria*



*This cafeteria tray contains one ripe banana, half a pint of milk, and a buttered whole-wheat lettuce sandwich. It is a well balanced, nourishing meal.*

**D**O you know that in the average school one child out of every four is underweight and that an even greater number have unsound teeth?

It is because of these conditions that progressive schools are making the cafeteria or lunch-room a definite part of the school health-teaching program. The foods offered to children are in accord with the accepted doctrine, *more protective foods—milk, leafy vegetables and fresh fruits.*

Among the fresh fruits, the banana has taken a leading place in this health-teaching program. Authorities say that bananas are important in fighting undernourishment and that Vitamin C, of which this fruit is a good source, is essential for proper tooth development. Every child likes ripe bananas and can enjoy them for little money.

In the International Medical Digest for June, 1929, Dr. Robert A. Strong has written of the discovery of the value of bananas in infants' diets and the increased use of this "assimilable carbohydrate" in the diet of growing children. Send for this editorial, "Bananas as a Food for Children."

"Bananas in the Modern Manner" contains new recipes and menus, all thoroughly tested.



*Many new banana dishes that children like are in the booklet. Send for it.*

**Send Coupon**

UNITED FRUIT CO.  
Educational Dept. No. 7  
17 Battery Place, New York City

N. S. 9-30

Please send me copy of "Bananas in the Modern Manner," and "Bananas as a Food for Children."

Name \_\_\_\_\_

Position \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

## "INTER-TWILL" Window Shades for SCHOOLS

*Fulfill all requirements*

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*If total exclusion of light is desired, specify Interstate "NO-LITE" Shade Cloth. Shadowless and light-proof in all colors including light colors and white.*

*Made in the color tone of your choosing*

**Interstate Shade Cloth Co.**  
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and

**The Lapsley-Interstate Shade Cloth Co.**  
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974 — Students Table for Chemistry, Physics, Biology, and General Science. This permits the students to face one way.

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## HAMLIN SOUND-PROOF DOORS INSURE QUIET CLASSROOMS

IDEAL study and recitation require quiet classrooms. Hamlin sound-proof doors and partitions insure that necessary quiet—that freedom from noise and abstraction detrimental to concentration.

### 10 Reasons for Hamlin Sound- Proof Doors

1. Sound-proof — assure real silence—you can't hear out—others cannot listen in
2. Airtight because edge-tight
3. Heavily felt-filled
4. Furnished in any finish to match woodwork
5. Sound waves and vibrations cannot penetrate in or out
6. Keep out dust
7. Keep out odors
8. Keep out light
9. Keep out draft
10. Insure privacy, peace and quiet

Architects the country over are specifying HAMLIN sound-proofed doors, for they know how highly school executives value the importance of quiet in their classrooms.

Hamlin Sound-Proof Doors are scientifically constructed for sound-deadening and are available in finishes to match any furnishings or woodwork.

Write for catalog of specifications and list of prominent school installations. Learn the modern method of insuring quiet classrooms.

**HAMLIN**  
SOUND-PROOF DOORS  
and folding partitions  
**IRVING HAMLIN**  
1501 Lincoln St. Evanston, Ill.



### Safe Under Every Condition

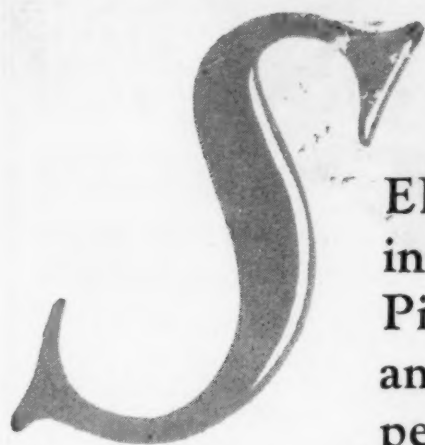
Distinguished not only in design but in performance—Halsey Taylor Drinking Fountains provide a degree of health-safety not obtainable in any other make or type. The side-stream is practical, uniform in height regardless of pressure-variation and tamper-proof. Automatic stream control, two-stream projector! The Halsey W Taylor Co., Warren, O.



**HALSEY TAYLOR**  
Drinking Fountains

No. 616

Many styles to choose from, all with the distinctive Halsey Taylor sanitary features!



SEEK out the reason for installing Duriron Drain Pipe at Johns Hopkins—and what do you find? So perfect satisfaction in buildings where Duriron

was the original installation that it is being used generally as acid waste lines elsewhere continue to demand replacement. Just corroboration of an axiom in planning laboratory plumbing, "A Duriron drain line is leak proof because the joints are calked, not cemented." It's basic economy to specify Duriron at the start. For data . . . . .



*Duriron has, from the start, carried the acid wastes in School of Hygiene & Public Health Johns Hopkins University*

*Archer & Allen, Architects  
C. L. Reeder, Engineer*



# DURIRON ACID PROOF DRAIN-PIPE

A Product of: THE DURIRON COMPANY, INC., Dayton, Ohio  
Sales Offices in 36 Principal Cities.



# SAFEST FOR SCHOOLS



## POTTER TUBULAR SLIDE FIRE ESCAPE

Over 3,000 now in use

Fire drills, when using a central hallway and staircase, are always a danger, as the world's greatest school catastrophies have proved. A scream or a cry of FIRE can easily create a dreaded panic even during Fire Drill.

### POTTER TUBULAR SLIDES

coast the pupils away from the center of the building to the outside air without the least danger from smoke, gases, fire, or panic. The Potter Tubular Slide Fire Escape has a service record and is approved by the Underwriters' Laboratories.

Write for details, specifications and list of schools using Potter safety methods

**Potter Manufacturing Corp.**

1861 Conway Bldg. - Chicago

# Stewart <sup>IRON and WIRE</sup> FENCES

built now will make school sports self supporting



WRITE FOR  
STEWART  
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SPECIFICA-  
TIONS WITH  
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It will soon be time for the opening game but by acting NOW you can have your athletic field Stewart Fenced before the "kickoff".

With the field Fenced, gate receipts will more than cover the cost of the various expenses including uniforms, equipment, etc.

Let us put you in touch with the Stewart Representative in your vicinity. He'll gladly submit a plan and cost estimate.

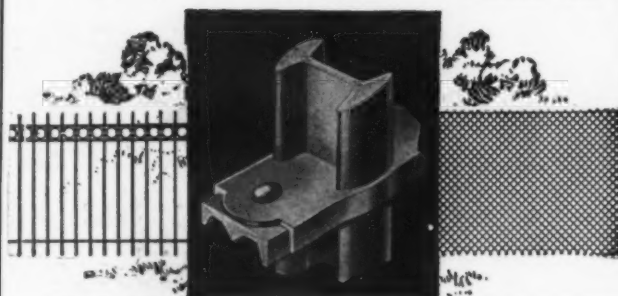


**THE STEWART IRON WORKS**

Incorporated

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Cincinnati, Ohio



Every Valleyco Blackboard is  
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## CINOPLATE

Meets Every Demand  
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Grainless; knotless; waterproof. Specially treated wood.

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Long asbestos fibre and Portland Cement. Built for permanence.

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Specially made wood fibres kiln cured.

Valleyco Blackboard is the nation's choice for a smooth writing surface . . . low installation cost and surprisingly long life. An investment, not an expense. Find out all about it!

Economical—Permanent—Guaranteed—  
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**The Valleyco Co., Inc.**

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Make the School  
Stage as Practical  
as the Theatre's

Vallen Curtain Carrying Tracks are all-steel, safe, noiseless and dependable, easily erected by inexperienced workmen and once installed require absolutely no maintenance. Easily operated by pupils either manually or with complete electric motor driven push-button operated unit. Let Vallen show you how hundreds of theatres, auditoriums and schools have benefited by using this equipment.

# VALLLEN



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# TO GET CLEAN, INVITING APPEARANCE HIGH QUALITY WIDE RANGE OF ITEMS AND SIZES SPECIFY VOLLRATH WARE



**E**NTER a school restaurant or cafeteria equipped with glistening Vollrath Ware, and you will be impressed with its clean, inviting appearance.

Look into the question of quality and you will find that Vollrath Ware has long been recognized as America's quality enameled ware. For over fifty years the Vollrath Company has maintained its policy of highest quality only.

Check up on the matter of completeness and you will find that Vollrath Ware is remarkable for the number of items and the range of sizes in which each is available.

Consider, too, that Vollrath Ware possesses a smooth, lustrous surface, easy to clean as china. That it absorbs

nothing and leaves no residue from previous cooking. That it holds heat longer and makes cooking more efficient. That all handles, spouts and other attachments are made a part of the vessel by gas welding so they cannot come off or work loose.

Natural enough, don't you think, that Vollrath Ware should be chosen by so many leading American institutions and schools?

*Write for descriptive literature  
of Vollrath Ware in white and in color*

**THE VOLLRATH COMPANY**  
ESTABLISHED 1874 • SHEBOYGAN, WISCONSIN

## SUPERVISION...the Keystone



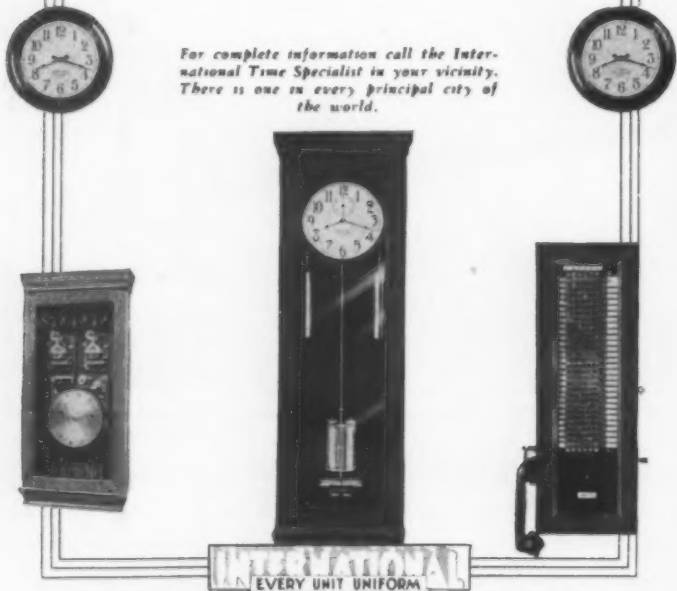
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FRANK I. COOPER CORP. ARCHITECTS BOSTON, MASS.

## of School Administration

Hundreds of the country's largest schools have found a permanent solution for their problems of time supervision by joining the ranks of the "International - Equipped." Year-in and year-out, International Automatic Program and Time Indicating Equipment dependably and uniformly fulfills its daily task of controlling the movement of classes and study schedules—on an hourly supervised basis!

No other system brings to the maintenance of school routine the accuracy, regularity and dependability provided by the International Hourly - Supervised Electric Time and Program System. "Hourly-Supervised Electric Time" is exclusively International.

For complete information call the International Time Specialist in your vicinity. There is one in every principal city of the world.



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Modern scientific equipment and management make it possible for you to enjoy the best in New York at the Lincoln. Bath, shower, servitor and the "sleepingest" beds imaginable in every room.

1400 Rooms—1400 Baths

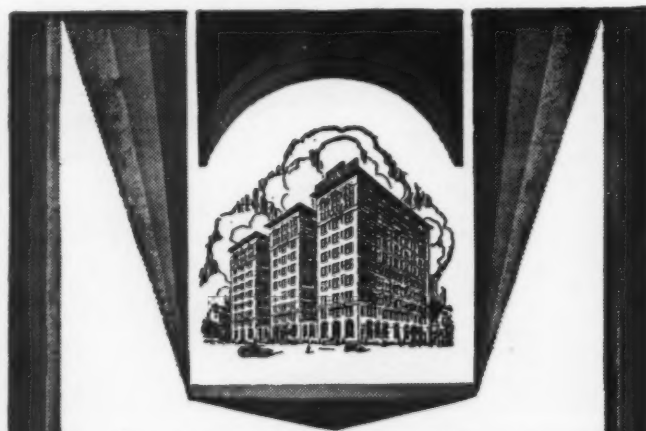
NEW YORK'S NEW

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Eighth Avenue, 44th to 45th Sts., Times Square



### Your Business is More Urgent Than Ours

THE intimate details of an hotel routine are apt to be vitally important to the man who is going some place, doing something. A brisk shower is an excuse to take your morning exercises with an honest-to-goodness man's-sized-towel . . . the Coffee Shop tempts you if you must hurry . . . if you have driven, your car is at the door—clean and slick and as ready to go as you are . . . Here at the Hotel Pennsylvania . . . 10 minutes from the dust and din of down-town . . . Come soon . . . and you will come again.

DANIEL CRAWFORD, Jr., Manager

Room with  
Bath \$3.00

**HOTEL**  
**PENNSYLVANIA**  
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# MORE THAN HALF THE TYPEWRITERS OF THE WORLD BEAR THE SAME NAME

**M**OST commercial students receive their typewriter training on the Underwood.

School authorities know that students on graduation will, in a great many cases, enter Underwood-equipped offices...offices where ability to use the Underwood will be a welcome asset.

Just as more than half the typewriters of the world bear the name Underwood... so more Underwoods are used for teaching typewriting than all other makes combined.

UNDERWOOD turns out more typewriters than all other manufacturers combined and for just one reason...

The demand for Underwood Typewriters exceeds all others. Back of that demand are qualities that are *exclusively* Underwood...

A key action demonstrably lighter,

more responsive, less fatiguing. *That* makes learning easier.

Durability that resists wear and minimizes repairs and replacements. *That* keeps your equipment costs at the minimum.

School boards and school executives recognize these outstanding Underwood qualities. They see them reflected in classroom records and equipment-maintenance cost sheets.

The Underwood has *earned* the place it holds in educational circles everywhere.

## U N D E R W O O D

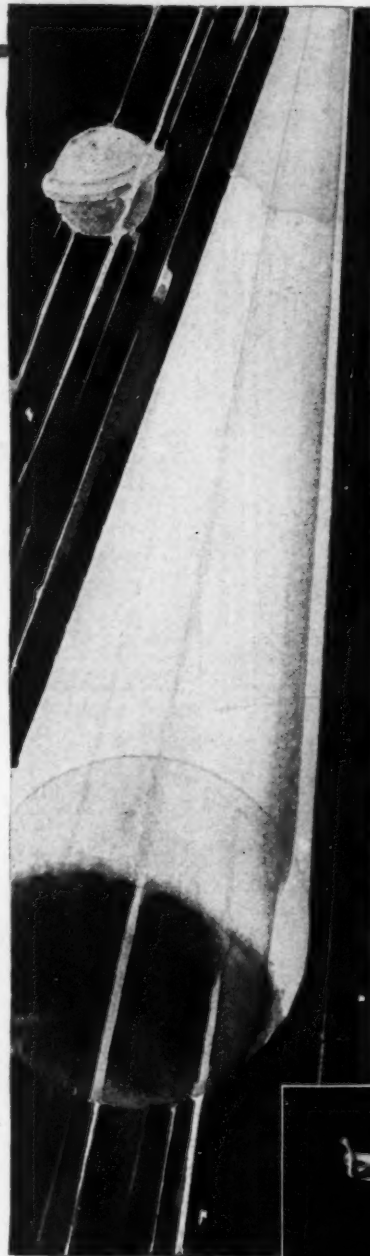
Standard, Noiseless and Portable Typewriters—  
Bookkeeping Machines

Product of Underwood Elliott Fisher Company

Distributed by

UNDERWOOD TYPEWRITER COMPANY  
342 Madison Avenue, New York, N. Y.

"UNDERWOOD, ELLIOTT-FISHER, SUNDBRAND—  
SPEED THE WORLD'S BUSINESS"



# UNDERWOOD



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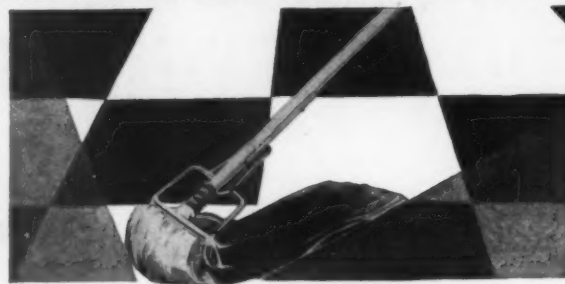
for drawings, diagrams,  
graphs, charts, maps, and il-  
lustrations of every type.

**T**O SEE as well as to hear what is being taught—is today's trend in education. Swing-Wing Displayors, the modern aid to visual instruction, help to "drive home" important facts in every course of study.

Let us tell you how hundreds of schools and colleges throughout the country are using Swing-Wing Displayors in classrooms, laboratories, lecture halls and workshops.

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## PRESERVES NEW FLOORS



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**LET** our Floor Cleaning Experts help you select the right cleanser for your floors. We manufacture Liquid Soaps for every type of flooring—Linoleum, Cork-carpet, Mastic, Magnesite, Rubber, Paint, Tile, Marble, Terrazza or Mosaic. Tell us the kind of floors you have. Our products clean thoroughly and rapidly yet without injurious effect on the floors themselves. Write us.

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# FALCON

## SCRUB SOAPS

# SCHOOL AUTHORITIES find

that mothers are impressed by this  
convenience for pupils and teachers

**M**ODESS is accepted by women as being far superior to other sanitary napkins—softer, more efficient and less bulky. When a mother finds that Modess is vended at cost in this handsome cabinet, she accepts it as evidence that the school is managed with consideration for the comfort and health of students.

The vending machine is self-supporting when napkins are delivered for five cents.

The cabinet, as illustrated, is mechanically perfect and is easily operated. Only the proper coin will deliver the napkin carton. When the cabinet is empty, the coin is returned. Separate lock on coin box gives double protection.

Write for descriptive circular and all details of this modern and expected service.

Distributed in the United States  
exclusively by

**ROCHESTER  
GERMICIDE  
COMPANY**

12 Dowling Place  
Rochester, N. Y.



This is the individual carton containing one Modess. It is a convenient size for handbag and is inconspicuous.



# This desk



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# ENCOURAGES *Cleanliness!*

**T**HIS practical and modern school desk has been purposely designed to promote cleanliness in the classroom. Because each unit of this desk is supported by only one rigid base, sweeping and cleaning are simplified. The one-unit under-construction leaves a much greater floor area noticeable to the pupil, who becomes more conscious of classroom cleanliness and is, thereby, less apt to litter the floor with scrap paper, etc. In addition, the trim design of the desk and chair standards eliminates all dust-catching corners and crevices. There are no aisle legs over which to trip or stumble. . . . These are some of the many practical reasons why school boards should give serious consideration to this modern, comfortable, and well designed desk set. Ask your nearest Heywood-Wakefield sales office for complete information on the H-W sanitary pedestal and other practical types of school seating.

## HEYWOOD-WAKEFIELD

MAKERS OF PRACTICAL SCHOOL SEATING



# FOURTEEN CLEVELAND SCHOOLS

## install COLT AUTOSAN

### Dishwashing Machines



A Model "B"  
Rotary Autosan  
serves the  
John Hay  
High School

Empire Junior  
High School  
has installed an  
"S-1" Rack Type Autosan

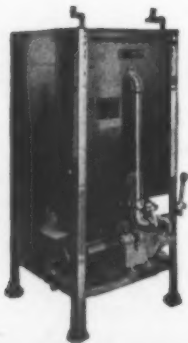
#### Other Cleveland Schools equipped with COLT AUTOSANS

Addison High  
Alexander Hamilton  
Central High  
Collingwood  
East Cleveland Junior High  
East High  
East Technical  
Thomas Edison  
Thomas Jefferson  
West High  
Wilbur Wright  
Wilson High

**D**ISHES for thousands of Cleveland students are handled daily—quickly, efficiently and economically—with Colt Autosan equipment. Keeping well ahead of peak lunch hour requirements with clean, unbroken dishes is the day-by-day, month-after-month accomplishment of Colt Autosans. Whether the service calls for the compact Model "S-1," the Rotary Model "A-2" or "B," or a still larger machine, Colt Autosans perform the work with utmost satisfaction, dispatch and economy. Ask any of these Cleveland Schools what they think of their Colt Autosan.

## COLT AUTOSAN

### Dishwashing Machine



Model "S-1", Rack  
Type, price in cop-  
per, \$615, F. O. B.  
Factory.



Model "B" Rotary  
Conveyor Type.  
Price in Copper,  
\$1500, F. O. B.  
Factory



There's a Colt Autosan to fit every space and need—  
from 100 to 2000 or more persons per meal—from \$615  
up. Descriptive "Packet M" will gladly be sent to you.

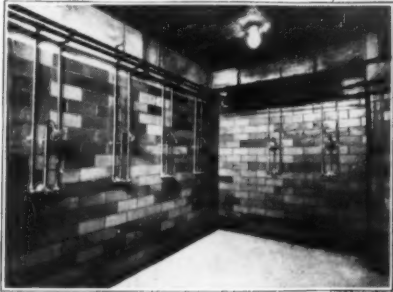
64-60



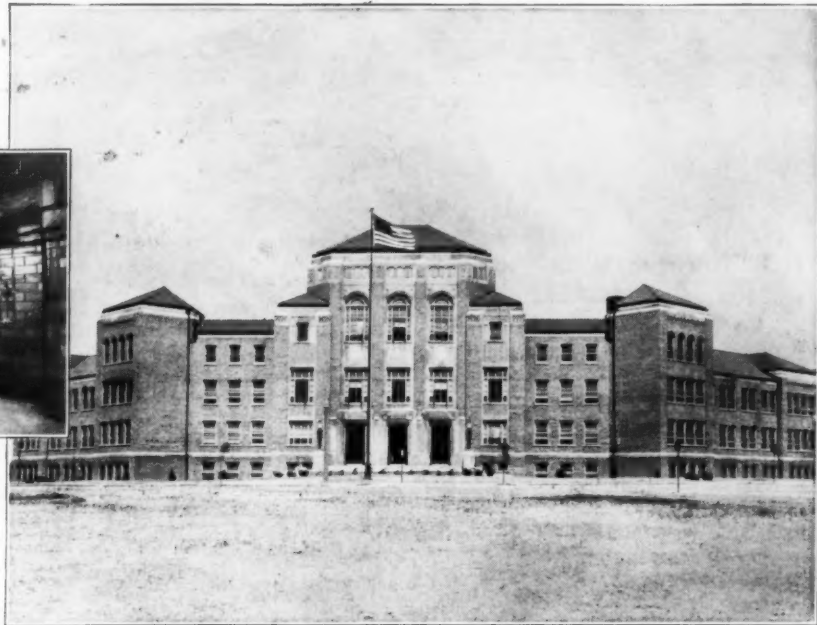
## COLT'S PATENT FIRE ARMS MFG. CO.

AUTOSAN MACHINE DIVISION  
HARTFORD, CONN., U.S.A.

MAKERS OF FIRE ARMS, ELECTRICAL EQUIPMENT, MOULDED  
PLASTIC PRODUCTS, DISHWASHING AND METAL-CLEANING MACHINES.



*The University City High School, St. Louis, Mo. Plumbing and Heating Materials furnished by Crane Co. Associate architects, Ferrand & Fitch, Trueblood & Graf. Plumbing Contractor, J. Sheehan Plumbing Co. Heating Contractor, Peters-Eichler Htg. Co. Mechanical Engineer, A.H. Vogel.*



## Another model school chooses Crane materials

In St. Louis, Mo., is the University City High School. Its builders have striven to make it a model institution in every respect.

To care for the intellectual needs of its students, a splendid faculty has been gathered, sound courses have been mapped out. To care for their physical well-being, every detail of the building exterior and interior has been care-

fully planned, wisely laid out, and an unusually high degree of sanitation and convenience achieved.

Although there are many larger schools, there are few better equipped, more efficiently arranged, or more soundly built. In this school Crane plumbing and heating materials have been installed throughout, again a gratifying recognition of Crane quality.



# CRANE



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# How Harvard University uses HOLOPHANE

## Lighting Units



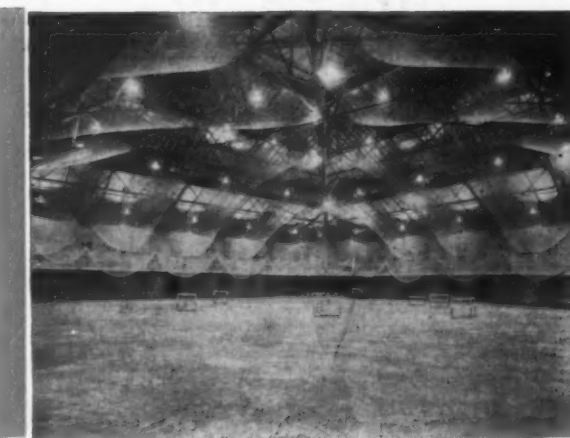
South Lecture Hall in Langdell Hall.



The North Wing Reading Room.



Court Room.



Gymnasium and Baseball Cage.

**H**ARVARD UNIVERSITY has found that Holophane Lighting Units give the best quality of illumination, and that the Holophane principle of building a specific unit for each specific lighting requirement makes it possible to have the best illumination everywhere.

Here are shown just a few of the places in

which Harvard uses Holophane Lighting Units. Many others could be shown; for instance, the particularly interesting installation of Holophane Bookstack Units used to spread light evenly over rows of bookstacks which are only about three feet apart. These are night-time photographs—not retouched.

Write for booklet—"Better School Lighting."

## Holophane Company, Inc.

342 Madison Ave., New York City

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